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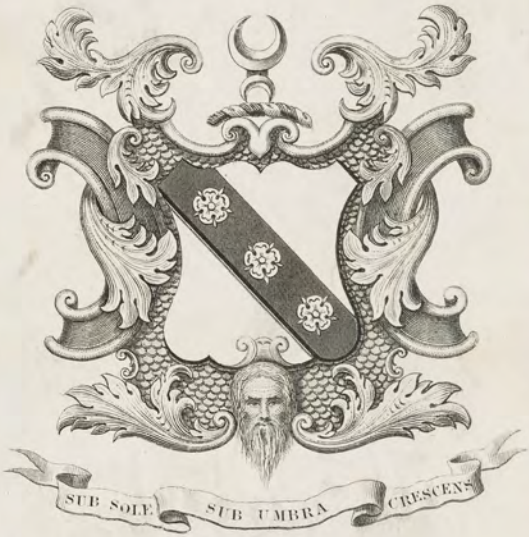

H. Lenox Hodge. M.D.

Edward Barton

Philadelphia April 1815.

Vol. 2

Lecture 26th — December 23d 1844.

Of particular diaphoretics, or the best means of exciting perspiration. — These are arranged according to their mod. operandi & are divided into 3 species. 1. those which increase the action of the heart & arteries; 2. those which stimulate the exhalents, 3d those which produce a relaxation of the surface. And first of those which increase action of system; Opium; as it stimulates highly, in order to procure its diaphoretic effects it is usual to combine with it Ipecac or antimony: thus take of Laudanum gt XX. (or Chlr. paregoric ℥j), antimonial wine gt. XL. & dulc. Spts. Nitre ℥i. Water ℥j. m. for a draught, to be repeated every 3 or 4 hours, as circumstances require. — But of all the diaphoretics, the best I know is the Dover's powder; being moderately stimulant, and at the same time relaxing to the surface, it is applicable to a vast variety of cases; it is composed of Ipecac, & Opium aa grj. Nitrat or sulphate potash grs viij. h. & is to be promoted by diluent drinks, particularly winewhey, which seems to answer best in exciting the diaphoresis; but these drinks are not to be taken before half an hour after the Dov. powder, otherwise they will cause it to puke. Besides these, Opium is used in combination with a number of other articles.

Camphor is not generally diaphoretic alone, but is combined with opium &c. thus ℞. Camphor ℈ss Opii gr. j. Calomel grs ij — or in place of Calomel grs iv of Ipecac; or sometimes the whole together; q. t. h.

Carbonate of ammonia is a diaph.c & is well adapted to low stages of fever &c, but many of its preparations are more diaph.c than it; the aqua Ammoniae acetate, or Spiritus Mindereri was once very much used, but has been supplanted by far less valuable ones; it is however once more acquiring a reputation as a diaph.c & febrifuge.

– More properly the Capat. Commation.

a tablespoonfull every two or three hours is an active and very useful diaph.c. – I have long used it, & think it the best calculated of all our diaph.s to induce diaphoresis in the paroxysm of intermitts. As it is not very stimulating, it may be given with less caution than many others, & as it is a cordial & pleasant med, it will be readily retained by the stomach, when every other one would be rejected; besides this it is refrigerant and gently laxative. –

– The Eupatorium perfoliatum or thoroughwort may be so managed as to be emetic, cathartic, diuretic, tonic, & powerfully diaphoretic; but it is this last property which renders it most valuable. – it is a native of this country and grows abundantly in every part of it. (it is annual) Every part of the plant possesses power, but the flowers are the most active. Exhibited in strong infusion, they seldom fail to excite profuse diaphoresis, & prove eminently beneficial in Fevers. –
In the Yellow Fever of '98. when the sweating mode was introduced, Dr Rush's favourite remedy was the Eupatorium – Dr Horack also used it with success in Y. F. of N. York, & also in intermitts. In some parts of this country it is given in intermitts to the exclusion of the bark, & has obtained the name of Agueweed. It may be given during the paroxysm to produce diaphoresis, or during the apyrexy to prevent the recurrence of the disease; for the first view it must be given in warm infusion; but as a tonic, in a cold decoction, or in substance. –
In the prevailing Typhus, the sweating plan in the 1st stage has been adopted, & the Eupatorium has been much praised; but being satisfied with the Dov. powd. I have never used it, but am informed by respectable authority, that it is very serviceable. –
It has been used in Some dropsies, either with a view to its tonic or diaphoretic power; & the above distinction is to be remembered in its exhibition. –

– For an account of this affection, & the use of the Cupat. perfol. See Notes on Dr B's lectures – Vol 2d. Pag 23. – Dr B. calls it the "James' River Ringworm"

– (Dr Physick says Zij is full enough to begin with, & Zjss would generally be rejected; he adds that Dr Rush & Dr Wistar are of the same opinion – best to feel the way before giving too much. E.B.)

Dr Barton says it is well adapted to some chronic cutaneous affections, particularly one peculiar to the Southern States. This might be expected from its active effects on the skin and perhaps also from its tonic power. It is undoubtedly the most valuable of our indigenous plants, & is so good an emetic that Dr Rush called it "the vegetable antimony".

There is another class of medicines, which act on the skin, but are not remarkably diaphoretic; such are guaiacum, Mezereon, Sarsaparilla, & several species of Laurus.

Guaiacum or lignum vitæ; of this genus there are 3 species, all natives of the W. Indies; the g. officinale is the one used in medicine. The wood & the gum-resin procured by exudation are used - it is a warm stimulant, generally diaphoretic, but sometimes diuretic and purgative. The wood is given in strong decoction, of which a quart is taken daily. This medicine was first used in Lues venerea, & for a time enjoyed great confidence, before mercury was known as an antidote to the venereal virus. Whatever efficacy it may have in relieving the symptoms of the secondary stage of lues, it is wholly inadequate to the cure of the disease. Mr Pearson surgeon general to Lock Hospital, where there are sometimes 3000 venereal patients, has given it a fair trial & declares it to be "incapable of curing the disease; but in cases where the strength is impaired by a successfull mercurial course, the membranes remaining thickened, or foul indolent ulcers still existing, these symptoms will often yield to the guaiacum; but in no case will it take the place of mercury" - See Mr Pearson's work

The guaiacum is a valuable remedy in rheumatism & gout; but never should be given in decoction in these diseases. The tinctures are to be used, of which there are two kinds; the simple, a solution of the gum-resin in alcohol, which I have rarely used, & the volatile tinct. which is far superior. The dose generally recommended is inefficient, & instead of a teaspfull, ℥i or at least ℥ss should be given,

on going to bed, & followed by wine whey &c. - If guaiac has lost any part of its reputation, it is because it is given in too small doses - I never saw more effects from a teaspfll of the tinct. than from so much water.

The Powder is also used, in doses of X or XX grs; more may be safely given; but it is inferior to the tincture.

Guaiacum is also used in Arthritic affections, particly the irregular forms, in arthritic colic &c. The g. will relieve the regular paroxysm, & is used also to prevent the recurrence of it; as a preventive, ʒij or iij - are to be taken daily. —

Mezereon - the wood of the Daphne Mezereon. it is acrid to the taste & considerably aromatic; a stimulating diaphoretic, or somet. diuretic; it resembles Guaiac & is used for the same purposes. In Syphilis its reputation rests precisely on the same foundation as the Guaiac. (Dr Pearson again)

Smilax Sarsaparilla; once used as a diaphoretic, and among the advocates of the humoral pathology, as a purifier of the blood; hence it was used in ulcerations, in Syphilis, diseases of the Skin, & to check the effects of a severe mercurial course; it is now much used in Rheumatism; it is analogous but much inferior to the two former; & is used in the same diseases & same quantity as the D. mezereon - -

The only species of Laurus I shall here notice is the L. Sassafras; it is a fine aromatic, & is used in decoction; except Guaiac, it is the most powerful of this class. — The Lisbon diet drink, or Decoctum Lusitanicum, Decoction of the woods &c is thus made. ℞. of the woods of Sarsaparilla
. . . . . Sassafras
. . . . . Red Saunders
. . . . . Guaiac. - aa ʒiij.
. . . . . Mezereon - - ʒj.
Seed of Coriander - - ʒvj.

Boil them in ℔ XX water, till reduced to ℔ X. - Strain & give ℔ss three, four or five times a day.

Lecture 27th December 27th 1814.

We proceed now to the second division of diaphor.
or those which produce a relaxation. There are but
few which have this property exclusively; most of them
are at the same time emetic, or purgative. Among
them the neutral salts are some of the most
important. In febrile affections this prep.n is
an excellent diaph.c Rx Sulph. Sodæ ℥ss. Emetic
Tartar gr j. Lemon juice ℥i. Water ℥iv. m.
℥ss. q. s. h. — if given oftener or in larger dose,
it will prove emetic & purgative.
Nitrate of potash is a very useful medicine,
but I think it is not remarkably diaph.c;
it seems to act by abating arterial action &
as a refrigerant, as do the acids: Nitre grs X. Emet.
Tart 1/6 or 1/8 gr. Calomel gr j. ij. iij. form the anti-
monial powders of Dr Rush —
All the antimonial preparations may be so
managed as to prove diaphoretic; but the best
of them are James's powder, & Emetic tartar.
the dose of the former is from grs V to X. & of the
latter from 1/4 to 1/8 gr. q. s. h. — Perhaps it
would be better to give it oftener & in smaller
quantities; for it is always of consequence to
keep up the impression of medicine, & to
none does this remark apply so forcibly as to the
diaphoretics —
Ipecac also proves an excellent diaph.c in
doses of grs ij q. s. h. & its efficacy is still greater
when combined with Opium, as in Dover's powder.
Carbonate of potash with some vegetable
acid, taken in the form of the effervescing
draught, or in simple solution; the former
is made thus: Sal tart. ℥ss. or ℥i. in half a wineglas-
full of water, & lime ~~juice~~ juice, q. suff. — this is to
be taken in the effervescing state. The Carbonic
acid is disengaged, checks the vomiting and

— Cold water internally. Celsus speaks highly of it in the hot stage of fevers; but of this hereafter under Miscellanea.

promotes diaphoresis; the Cart. pot. may also be given in simple saturated solution. Thus, Water & lime juice (or sharp vinegar) aa ℥ij. add to this, salt of tartar to saturation, that is, till effervescence ceases & then ℥ij sugar. — This forms an excellent preparation, for checking vomiting & producing sweating. dose ℥ss. q. 2. vel 4. h. —

The 3d division are those which act immediately on the exhalents; as heat applied to the surface either in a dry or moist state. heated bricks, bottles of hot water, applied to the feet, thighs, axilla &c. the body being kept warm by a more than ordinary quantity of clothing, & a free use being made of warm infusions of moderately cordial aromatic herbs. In some local pains, it is often convenient to substitute for these, bags of heated salt, sand or ashes; In some cases of colic, a large bag filled with hot mush, applied to abdomen. relieves the pain almost immediately.

Vapour or steam is sometimes preferred, & is applied by pouring vinegar &c on heated bricks, & wrapping them in flannel. — Bathing of the feet in warm water. — the Tepid, warm or hot bath. but of these we shall speak fully under the head of Miscellanea. Frictions &c.

Emmenagoga. — Emmenagogues are such medicines as are supposed to promote the menstrual discharge; of their uncertainty every one complains; & by most physicians it is attributed to our want of medicines, which act directly on the uterus; but I believe that we have such medicines, and that our failure depends rather on our mistaken notions of the nature of the Catamenia, & our want of attention to the state of the system. In fact our practice has been in a great degree empyrical; & to obviate this, I shall commence the subject by a brief enquiry into the nature of the discharge. —

Contrary to the generally received opinion that the menstrual discharge is mere blood, I maintain it to be a peculiar secretion, in support of which, the following are the leading arguments:

1. The uterus in its structure resembles a gland, and is liable to the same diseases as other glands.

2. Like other secretory organs, it is furnished with a very large quantity of blood.

3. By the arrangement of its vessels, the blood is retarded, so as to allow secretion. —

4. In common with other secretions, menstruation is at first imperfect, & is afterwards subject to vitiation & derangement.

5. In many of the inferior animals, during the season of venereal incalescence, there is a discharge from the uterus, which is undoubtedly a secretion. If the venereal desires suffer an exacerbation from restraint, the discharge becomes red. —

6. In amenorrhœa, the discharge cannot be restored by inducing plethora; & when regular, it cannot be checked by V.S.

7. That the menstrual discharge is different from blood is manifest, from the difference of its colour & other sensible properties, from its want of coagulability, & from chemical analysis.

– See Eclectic Repository Vol. 2d. p. 97. On use of Phlg. Sency. in Amen.a by Dr Chapman. –

The theory of the menses being a secreted fluid is attributed to Mr. John Hunter. It was maintained in a thesis at Edinburg in 1778 by Dr Craven. –

If it be objected that the uterus is not sufficiently glandular in its structure, I would ask, of what does a gland consist but a mere congeries of vessels? If a few vessels, creeping through the coats of the stomach, can secrete the gastric liquor, why may not the infinitely more glandular organization of the uterus elaborate the menstrual fluid? — Amenorrhœa then according to this theory is an interruption of the secretory action of the uterus.

I shall divide emmenag. into two classes; 1. those which increase & 2d those which decrease arterial action; & first of the former is the

Polygala Senega, a native plant. the root is the only part used, & is bent & contorted & apparently jointed. - it is an active and diffusible stimulus; an expectorant, sialagogue, diuretic, diaphoretic &c at the same time increasing the action of the heart & arteries. Dr Cullen however thought it a very feeble medicine, and placed it among his Cath.cs, because, he said, its purgative property was the only decided one it possessed. from this I conclude his experience with this article must have been very slight; for it seldom purges, unless in very large doses, but produces its best effects, when not cathartic.

Dr Tennant of Virginia in the beginning of last century, brought this medicine into use for the bites of venomous animals. but to Dr Harlestone of this city we are indebted for the discovery of its efficacy in amenorrhœa, in which it displays its best powers. As soon as I heard its use from him, I commenced experimenting with it, & have used it with such success, as warrants me in recommending it to you as our best emmenagogue. It may be used in powder, gss X or XV. at a dose, or in decoction, which last is far preferable; ℥i of the root to a pint of water, simmer down ℥ss. of this ℥iv may be taken daily, but when the discharge is

expected, the dose must be pushed much farther; I have given as much as ℥ij every hour for a day or two. During the intervals I omit it for a week. — It is apt to excite nausea & vomiting; if so, add some aromatic, as orange peel.

The following cases I have selected from a very large number, as they will suffice to show the decided efficacy of this medicine — (Alnwick House)

Case 1st. A maniac aged 25 who had been confined in her cell for more than a year, being for the most part furious. She had been copiously depleted by every means, and had undergone a salivation &c. She had used the Digitalis, Tobacco, & many other medicines without any favourable impression. Being told she had not menstruated since her illness, I directed the Polyg. Senega; occasionally to lose some blood & to use the tepid bath. After a few days she was better, and at the end of some weeks a copious flow of the Catamenia came on; with the most salutary consequences. Her mind now became tranquil, and the medicine being continued, four weeks after she again menstruated, & becoming still better, she was dismissed. Her intellect however had been considerably impaired by her long derangement, and did not quite recover its former standard. —

Case 2d. Also a maniac, in many leading features resembling the last one. — In this case however the mind was more sane, but a strong tincture of lewdness was observed in her deportment; and in less than a week, this was so much increased as to amount to confirmed Nymphomania, associated with extreme mental vivacity, and apparent joyousness of heart. I immediately ordered the Polyg. Senega, which she took for a fortnight without advantage; the dose was therefore increased to ℥ij every hour. At my next visit, (3 days after), I was struck with

the extraordinary alteration in her demeanor. Instead of the eager & impassioned salutation which I had been in the habit of receiving from her, she remained on her bed tranquil and placid: composed both in mind & body, she seemed to be indulging in melancholy contemplation, from which it was not easy to divert her. Inquiring of the nurse, what had so suddenly revolutionized her condition, I was informed that she had been menstruating copiously for the last 36 hours. — I then omitted the med. & trusted to Nature, but in 3 weeks some menaces of a relapse appearing, I again resorted to the same med. which speedily had the desired effect, & she again became convalescent as before — My time of attendance now expired, & I am unable to say what the final result was. — See Eclectic Repertory Vol 2d. p. 94.

In all the forms of amenorrhœa, I suspect the senega may be useful, if administered with a proper regard to the state of the system; but it promises to be particularly so in those cases where the decidua exists.*

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* See Burns's midwifery; Chapman's edition, for an account of this membrane, in Ed. note, on Amenorrhœa.—

– a small evergreen shrub with short, prickly, narrow leaves; when old, it bears dark blue berries.

Juniperus Sabina or Savine. a small evergreen shrub, & a native of the South of Europe; the leaves only are used, & have a strong disagreeable smell & acrid taste; it is nearly allied to Senega in its properties, & is a warm, powerful & diffusible stimulus, increasing the secretions, & determining with particular force to the uterus. It has been used to accelerate labour & to procure abortion, & of its efficacy for these purposes we have abundance of proof. It has always been remarked that it is particularly apt to produce hemorrhages from the uterus, & hence its use was indicated in Amenorrhœa. The first satisfactory account of its medical powers was given by Dr Home of Coldbg; but Dr Cullen a still greater authority speaks slightly of it, & brought it into disrepute. It has however always been esteemed by many, & is now much used as an emmenagogue, for which purpose it is recommended by Burns &c. I have never been obliged to use it in amenorrhœa, but from its general properties should judge it eminently useful in some cases. as it is a very active stimulant, it is to be used only in the atonic cases; indeed its loss of reputation, I think, was owing to its too indiscriminate use.

Of its utility in Chronic Rheumatism I can speak with unlimited confidence. I have now been in the habit of using it for 3 years, & am inclined to place it very near the head of medicines for Chronic Rheum. but for its successful application, it requires a nice discrimination in the choice of

cases to which it is applied. These cases it is not easy to point out by any description, but by experience we are taught to distinguish them with considerable accuracy. There are many cases attended with cold skin, either dry or covered with a clammy sweat; rigidity of the joints, amounting sometimes even to loss of motion; pains often acute, & aggravated by vicissitudes of the weather &c, and this state will continue in spite of the best concerted plan of treatment. There is no doubt of the state of the parts in these cases. It is evident that the circulation is carried on imperfectly from a debilitated and exhausted condition of the vessels, which occasions them frequently to be thrown into painful spasmodic actions, whenever external heat, or internal stimuli do not contribute to support them. That the pain under such circumstances is produced by a species of irregular convulsive motion, having its origin in the languor of the part, and not by inflammation, is evidently proved by the fact, that the disease never goes off by any one of the terminations known to inflam^n. The joints will indeed continue, for a while, puffed, & the limb swollen, but there is neither effusion nor suppuration. Conformably to this, stimulants internal and external are used; ammonia, turpentine, cantharides, anim, mezereon, sarsaparilla, guaiacum &c, and it is in these cases that savine is so efficacious. It produces a heat and itching on the surface, sometimes an eruption, and ultimately some slight perspiration. Under its use the pulse becomes more forcible & voluminous, & the patient regains his strength, either from its tonic power, or from its alleviating the pain. —

I have used it with equal advantage in syphilitic Rheumatism. As I consider this as purely a consequence of the use of Mercury, I am disposed to think the savine would also be useful in other mercurial diseases; but more of this, under Mercury.

By some recent journals, I find it is used in Europe in Gout; & Professor ***** of Gottingen asserts that it gives tone to the alimentary canal, & relieves the nausea, flatulence, & acidity in atonic Gout; and also that it relieves the arthritic headaches, which I suppose generally depend on the state of the stomach.

— The Savine has been a good deal employed as an anthelmintic and with some success. —

Some recommend it even in the regular and inflammatory Gout, but this appears to me an improper practice. —

The dose is from grs XX to grs XXX; I generally begin with grs XV. t.d. & increase till some sensible effect is produced. I have given as much as ℥i. t.d. — if it purges, Laudanum may be used to prevent it. The oil is also used, but is very active; dose gtt iij, iv. or v. I prefer the powder. — The leaves are used externally as an escharotic, either in powder or infusion — Equal parts of the powder & verdigris form a good application for warts & other excrescences — The infusion is used as a wash for foul ulcers, for tinea capitis, &c &c. The unguentum Sabinæ is used to dress blistered surfaces to keep up the discharge. —

The leaves of the Red cedar or Juniperus virginiana of Linnæus are very similar in their properties to the Savine, & may be a good substitute, at least, in the unguent for blisters. —

Rubia Tinctorum or Madder has long been used as emmenagogue. It tinges the urine & bones of a red colour, & hence was supposed to be an excellent deobstruent. Dr. Cullen thinks there is something imposing in its operation, & that it is quite useless in amenorrhœa — but Dr Barton says he has seen it produce remarkable effects as an emmenagogue, & it has been often used to procure abortion. I have never employed it, as we have several more efficacious med. The dose generally recommended is grs XX to grs XXX. but much more might be safely given.

— This is not the pennyroyal of the U. States, which is the "Cunila pulegioides." —

Rosmarinus officinalis or Rosemary was formerly much used; it is a native of South of Europe but is cultivated here; it is a powerful and diffusible stimulus, acting particularly on the nervous system, and hence is used in Paralysis &c. Borghi used it with success as an emmenagogue, but Dr Cullen it is contemptuously noticed. I have however used it with great advantage. a tumblerfull of a strong infusion is to be taken 3 successive nights at bedtime, & then suspended.—

Nearly allied to the Rosmarinus is the Mentha pulegium or penny royal, which was supposed to have a particular action on the uterus; Linnæus asserts that all mints are apt to produce uterine hæmorrhages, but this I very much doubt. Haller says the pulegium with iron is an infallible emmenagogue; but this language is certainly too strong.— Dr Cullen speaks slightly of it; I know nothing of its efficacy from experience but from its analogy to Rosemary (which I know to be useful) I should presume it to be worthy of a trial.—

Tinctura Cantharidum gt. x. t. d. increasing to ʒij or iij a day.— it increases the pulse & proves diuretic.

Oleum Terebinth. ʒi. b. vel t. d. combined with mucilage of Gum arabic &c.

Phosphorus— I used it in one instance of amenorrhœa, but the prejudices of my patient made her desist from it too soon to see its effect. I gave 1/x gr. t. d. intimately blended with olive oil & mucilage G. arabic.—

In Typhus, gangrene &c it is highly recommended, & probably is a valuable medicine, as it is a very powerful stimulant.

Lecture 29th January 2d 1815.

Dr Chapman, after a few remarks on the specific actions of medicines, read to the class a dissertation on the Secale cornutum or Ergot, by Dr Prescott – Salem Mass. read before the Mass. Med. Society. — Dr Chapman has only tried it in one case, & in that, it was to arrest the hæmorrhage during labour, & whether from this medicine or from accident, the hæm. soon ceased. — SEE Prescott's Diss. on Ergot.

— Dr Physick prefers sound cider, as a menstruum, to wine

÷ [Dr Wistar informs me that an emmenagogue is now much used, which he has found successfull in two cases, viz. the expressed juice of the blades of wheat (when about a foot high) — a tablespfull twice a day for several weeks." — Dr Physick]

Lecture 30th January, 3d 1815.

We have hitherto spoken only of those emmenagogues, which are powerfully stimulant; but Amenorrhœa perhaps more frequently demands only tonics. The tonic most deserving of our attention is the iron; of which there are a vast variety of preparations, but as emmenagogue the most valuable is the rubigo ferri, or carbonate of iron. Dose gr X or XV. t.d. But this is a disagreeable medicine, & is generally combined with some others, which render it less nauseous. ℞ Peruvian bark ℥ij. Pulv. Zingib ℥ij Rubig. ferri ℥j. made into an electuary with syrup. — or a better form is the chalybeate wine, made as follows; ℞. Rub. ferri ℥ss. Gentian & orange peel ana ℥ss. — Portwine ℔ij. — the ingredients are to be bruized, & then put into the wine, & exposed to a moderate heat, either in the rays of the sun, or near the fire, for two days, being shaken occasionally; then it is to be decanted, & given in the dose of ℥ss wineglassfull t.d. — This is very grateful to the stomach, & an excellent tonic in dyspepsia. It is a common practice to join to this some one of the fœtid gums, asafœtida, Castor, galbanum, musk; but I have never used any except asafœtida; As Hysteria is frequently symptomatic of amenorrhœa, I have given it asafœt. but with no marked advantage; indeed I consider the fœtids as very feeble medicines in amen.a. Myrrh however is more powerful, & has been strongly recommended in combination with the tr. of zinc; 1 or ij grs of the latter to grs vj or viij of myrrh. t.d. —

A variety of other means are used to restore the tone of the system, but they can

scarcely be termed Emmenagogues, as cold bath, of 50° or 60° Fahr., best used as a plunge or shower bath; frictions to the lower extremities, nourishing diet, exercise, particularly if the lower limbs be much used, as in spinning, dancing &c.
Blisters to the inguinal part of the thighs, are often our best emmenagogues.

We are now to mention those which decrease action. Amenorrhœa is often connected with a high degree of action, & not unfrequently attacks full habits, with flushed face, inflamed eyes &c. V.S. is in these cases the most prompt and efficacious mode of reducing the system — it unlocks the uterus, and prevents vicarious hemorrhages from the brain, lungs, stomach &c. I have more than once observed after a copious venesection the obstruction removed, & the menses speedily return. But we must not neglect the auxiliaries, active purges; of which the best is Aloes, as it invites a determination to the hypogastric region — Aloes & Calomel, or myrrh in pills &c.

Helleborus niger or black Hellebore (melampodium) in doses of grs X or XV purges actively, but is more remarkable for its emmenagogue powers — the celebrated Dr Mead first introduced it & proclaimed its efficacy in the strongest terms of commendation; but Dr Cullen speaks of it as he usually does of Emmenagogues, & it fell into disuse. It is now however regaining its place; they are using it extensively in Europe, & Dr Barton & Dr Rush of this city consider it as the most powerful of the emmenagogues. — It is calculated for those cases, which are accompanied with a torpid action of the alimentary canal &c. The dose is grs X, given in divided portions. — Of the tincture (Tinctura Melampodii) the dose is ℥j, increased to ℥ij if necessary.

[The pain in Dysmen. is somet. so excessive, that the extremities become cold, the pulse hardly to be felt, & somet. convulsions occur. In these cases, (depending mostly on spasm) Emetics are very useful, even if the pat.t have been vomiting; for an active emetic will often relax the spasm & put an end to the pain immediately. If not, I generally prescribe the Elixir Proprietatis ℥j. every two hours till it opens the bowels, & I have seen this perform what no other medicine would do. — Warm bath &c. — In a very severe case in which I was consulted yesterday, the Emet. & Elix prop. were given with considerable alleviation, but at X in evening I was called, the pain &c having returned with equal violence, & I prescribed an injection of ℞ Terebinth ℥ss beat up in the white of an egg, & half pint of milk. This relieved the patient entirely in a few moments. Opium & Camphor are often very useful &c (Dr. Physick)]

Menstruation is sometimes performed with much pain, and the discharge comes away slowly & deficiently; this state is called Dysmenorrhœa, and depends on an imperfect secretory power of the uterus.
The remedies to be used must depend on the state of the system; it is generally attended with morbid action, & hence V.S. and diaphoretics are to be used. Opium ℞. ij. iij grs with Camphor grs X. or xij. is one of our best remedies to relieve pain, & the dose is to be repeated if necessary. When the pain is so severe as to call for immediate relief, an anodyne enema, of ℥i Laud. with mucilage, should be given perhaps an anodyne injection into the vagina. Warm bath is never to be neglected, 98°. or 100°. Fahr. Warm fomentations to the hypogastrium by a bladder half filled with warm water &c. — Ext. Conium & Hyoscyamus have been recommended & we ought to try Stramonium.

In treating Amenorrhœa you must prepare for disappointment. It sometimes depends on the state of the ovaries, and all emmenagogues must fail. But these cases are comparatively rare and a large majority of cases may be treated successfully, by attention to the state of the system.

Lecture 31st. January, 5th 1815.

Anthelmintics, that class which destroy or expel worms from any part of the alimentary canal. This is an extensive assortment, comprehending a great number of articles, which have been variously arranged, & are endued with very different properties 1. Some act as poisons to the worms; 2. others expel them merely by a cathartic operation; 3: others destroy them by mechanical irritation; & a 4th divine change that condition of the stomach and alimentary canal, on which the disposition to the generation & sustenance of worms depends. — This has been made the foundation of an arrangement of this class, but as each kind of worm has its appropriate remedies, I prefer arranging these articles according to the worm for which they are most calculated —

The worms infesting the alimentary canal are divided into the round & flat. Of the former there are three, the Ascaris lumbricoides, commonly called the lumbricus, the Ascaris vermicularis, & the Trichuris. Of the flat, the Tænia & the cucurbitinus.

The lumbricus has been considered the same as the earthworm (lumbricus terrestris) but is very different. the lumbricus is found in the duodenum, jejunum and ileum; rarely in the stomach and large intestines, & when there, are probably endeavouring to escape from the body, being expelled by disease or by anthelmintic medicines. they are from 5 to 12 inches in length and generally in great numbers.

Ascarides occupy the rectum, tho' sometimes they are found in the stomach & hence called mawworms. but pain in the stomach by no means indicates this species particularly — they resemble thread cut into pieces.

The Trichuris or hairworm is about 2 inches in length, with a long tail, and a proboscis, which it can protrude at pleasure, like the bots. it is very rare & not accurately described. it inhabits the ileum.

Of the flat worms, the tænia is strictly the only one. it is from x to L feet long, resembling a piece of tape. it consists of distinct joints, each of which is capable of becoming a separate animal — & these joints are what have been called cucurbitini. (from resemblance to pumpkin seed)

The origin of worms is an object of curious speculation; but as it is not within my province, I shall only observe that they all belong exclusively to the human system, and when carried out of it, they die.—

Tho' we are ignorant of the causes of worms, yet we know the conditions of the system, which favour their generation. Debility, particularly of the alimentary canal, attended with emaciation &c generally indicate worms in children — The age which is peculiarly liable to them is after one to 3, 4, 5 years. Why so young children are more liable to them than older persons are, I cannot say: some have attributed it to a greater quantity of mucus, forming a nidus for them &c.

It has been disputed whether worms are injurious or harmless. Some have even gone so far as to assert that they were highly useful, in the animal economy, executing the duty of scavingers, & taking up the indigested sordes in the alimentary canal. But all, who are conversant with diseases of children, must without hesitation reject this opinion. There is scarcely a disease but these will either excite or imitate. Epilepsy, Mania &c. Winter before last I was called to a patient with croup in conjunction with Dr Witar. Emetics & the usual remedies had been given without effect; in the morning a large lumbricoides was thrown up, & every symptom vanished; Dysentery also. — Both disease most commonly produced by them is the Febris verminosa, which is a slow remittent. the exacerbations are always attended with drowsiness or coma, and the remissions with vigilance or watchfulness. In this fever, the head is often much affected, stupor, delirium; the eyes are wild, the pupils dilated, strabismus, the ala of the nose contracted, cheeks flushed &c. So many symptoms of Hydrocephalus are present, that it is easily confounded with it. but in worm fever, there is a very strange change of the voice & sometimes loss of it. —

– the breath is peculiarly offensive in the morning before eating. —

Dr. Physick says, if given in this way, the parent will be most alarmed by the loss of sight &c, which it will produce in 1 case out of 5. To avoid this, Dr. P. directs for a child under 2 years ℥ss, or for one 2 or 3, ℥j of the root to be boiled in ℔j of water & simmered to ℔ss. then add sugar & milk, & the whole ℔ss to be taken at bed time. The effects on the nervous system are not noticed & pass off, & in the morning the child is as well as before. This is to be repeated 3 successive nights, & then the worms are brought away in great numbers by a dose of Calomel.

Dr Physick

Lumbricoides. — Worms may generally be suspected, where great emaciation exists, & particularly weakness of the bowels, with a discharge of slime: they however not unfrequently exist in robust persons, with no detriment to health, or any inconvenience except pain. — the symptoms generally attending this kind of worms are pains in the belly, intestinal irritation, a variable appetite, sometimes voracious, sometimes depraved, craving dirt, chalk &c. tumefaction of the belly at night, breath very fœtid, alternate diarrhœa & constipation, very pallid countenance, & swelling of lips. — the little patient lies at night on its belly, its rest is disturbed, starting &c. — a picking of the nose, occasional headache, a dry cough, slow fever & sometimes convulsions. No one of these symptoms is an evidence of worms, but the existence of several of them leaves little doubt of their presence; & the most efficacious remedy is undoubtedly the Calomel, in as large doses as possible, at night, and in the morning a dose of Castor oil or Rhubb. to purge it off. And this plan, if necessary, may be repeated every other night — Next to Cal. is Spigelia Marylandica or Carolina pink, which is a most powerful anthelmintic, particularly for lumbricoides. it is indigenous, & every part possesses power, but the root is best & the only part used. — It is exhibited either in powder or infusion — of the powder V to X grs for a child 2 years old, ʒj for an adult. — but it is more generally given in infusion. ℥j of the bruised root in a pint of boiling water, & simmer down till ⅓ escapes. of this ℥ss for a child 2 years old, & ℥ij for an adult. — but it must be watched, as it may produce, even in ordinary doses, a train of nervous symptoms, as vertigo, false vision &c. very alarming to the parents. — It is evidently a

narcotic, & it is in my opinion by this poisonous property that it proves anthelm.c; some assert that it is only by its purgative power; but I doubt the correctness of this opinion, for I have seen it prove anthelmintic without purging in the slightest degree.

Bindy worms, Spigelia is said to be used in some slow remitting fevers with advantage.

Its poisonous effects are said to be corrected by combining it with Serpentaria &c.

Helleborus fœtidus; a native of this country as well as of Europe. it has a stalk about 3 feet high, & grows in swamps or meadows; its smell is very offensive & taste acrid. it operates powerfully as emetic & cathartic. of the dried & pulverized leaves, the dose for an adult is from V. to X grs every night for several nights in succession - it is an active anth.c & tho' I have never used it, I place much confidence in it from the statements of respectable authorities; but it must be used with caution, for it is a poisonous plant & often operates dangerously, & even has proved fatal - — It is said also to be useful in Hypochondriasis &c. -

Melia Azedarach, pride of China, poisonberry tree, Tallow tree &c. - a small but beautiful tree, which flourishes in the Southern States; it is said to be originally from Japan, but is now completely naturalized in this country - the root, or rather the bark of the root is the part used, & is exhibited in two forms; the most common mode is a saturated decoction, of which a teacupfull is given for several evenings in succession. It is also used in powder, but the other mode is preferable. I have used it but little, but from the few cases in which I have prescribed it, I am inclined to think very highly of it. It is a very popular remedy in the South-ern states, & is even preferred to the Spigelia Maryl.-

Whether it be equally applicable to the other species of worms as to the lumbrici, is not known; it is said to be useful in cases of Tania. — This also is a narcotic, & in too large doses produces a train of nervous symptoms, similar to those from Spigelia.

Chenopodium anthelminticum, Jerusalem oak, a native vegetable, which grows in every variety of climate. A tablespoonfull of the expressed juice is given morning & night on an empty stomach — but more generally a tablespoonful of the powdered seeds (called wormseeds) is given enveloped in honey or mucilage. — This is perhaps the best remedy for Lumbricoids, with the exception of Mercurials. The oil of wormseed is a very favourite remedy in this city, & is given indiscriminately in every kind of worms — 5 or 6 gtt. for a child one year old, three times a day, & after some days a purge of Calomel. If the worms do not appear, recur to the oil as before; but the dose 5 or 6 gtt. is small even for a child of one year. — I have been so much disappointed with the oil, that I have lost my faith in it. — It has a very offensive odour & taste, which are so tenacious, that they remain several hours. —

Ascarides, or the small worms occupying the rectum & distinguished by an itching about the anus, sometimes amounting to an intolerable irritation, generally aggravated in bed. — besides this all the symptoms denoting other worms, are present. — They frequently creep out of the rectum and are found on the bedclothes, & also in the stools — I know only one general remedy, & that is purging. Calomel or Cal & Aloes; but the best way to administer them is by injection — Aloes ʒi or ʒij in a pint of new milk injected up the Rectum & repeated twice a day. A weak infusion of tobacco; a solution of asafoetida — Limewater — Olive oil — camphor 12a
Solution of hepar sulphuris, expressed juice of

Tansy, or Rue — Solution of common salt, a tablespoonful of salt to half pint of water. this last is very efficacious, & Dr Rush says he hardly ever knew it fail. The first & last are undoubtedly the most certain. — After either of these infections, a cathartic is to be given, & the enfeebled worms will be brought away. Of all worms, the Tænia is the most difficult to destroy — There is no decisive distinction between the symptoms of this & of other worms; in Tænia there is a steady gnawing pain in the stomach, and all the gastric affections exist in an eminent degree. The remedies generally recommended for Tænia are often inefficient; of them the best perhaps are the mercurials — The Calomel, Turpeth mineral, & corrosive sublimate; the last is decidedly superior to the others, & is to be given in solution, ½ or ¼ gr. dose. next to mercurials, comes the Polypodium filix or male fern; dose ʒi to ʒiij with syrup. a strong purgative must then be given — This has been so much praised, even as early as Galen, that no doubt it possesses anthelmintic powers, but I have found them very weak. Dr Cullen thinks it very doubtful whether it has any such property, but it is much used in Germany, & instances of its success have been related in New York. It formed the basis of the celebrated tapeworm powder of Madame ‘‘‘‘‘‘ Polypodium Virginianum of our country resembles it in properties, & maybe equally powerful. Dolichos pruriens, a native of the West Indies. the hairs or spicula are used, & equally for every species of worm. Its operation is said to be purely mechanical, the spicula pricking & irritating the worms; we should suppose they would irritate the villous coat of the intestines but experience shows they do not. — An argument in favour of their mechanical operation, is that in infusion they are inert — Dose ½ to ʒ ss enveloped in syrup. Dr Thomas in his "practice of Physick" speaks in high terms of this article. —

– from the Philosophical Magazine Vol. XXXVI.

Tænia has been also treated by blue vitriol, Tin, arsenic, and recently the Ol. Terebinth. this last is the only one, the efficacy of which is supported by authentic cases. Several cases are related in the Ecl. Repertory Vol 1st, in the 1st of which, by Dr Lettsom, ℥ix of the oil were taken at a dose. It is best to commence by half a table spfll & increase to ℥ij. - It produces no more sensible effect on the fauces & throat, than so much brandy; but it purges very actively.

The next object, after expelling worms, is to prevent their reproduction. The origin of all kinds is weakness of the digestive organs, & hence the indication is to strengthen them. Rub. ferri, limewater, bitters & other tonics; and a variety of other remedies, as recommended for Dyspepsia.

Lecture 32. January 17th 1815.

We now proceed to those medicines, which increase action, and then we divide into diffusible stimuli or incitants, & permanent stimuli or tonics; the former including narcotics and antispasmodics; and the latter astringents and tonics. — The articles of this class are so numerous, that it will be impossible to enter minutely into the history of each individual; but I regret this less, as they are very analogous in their effects, differing only in strength, & some slight variety of action —

Opium. This perhaps is, next to mercury, the most extensively useful article of the Mm. Scarce one solitary morbid affection exists in which opium is not given either alone or in combination. —

It is a product of the Papaver somniferum, which flourishes very well in this country, but is a native of the South of Asia. — It was called Thebaicum from its being at one time brought exclusively from Thebes — Two kinds are brought to us, the turkey opium from the Levant, & India opium from Bengal. the latter is more dark & fluid than that from Turkey, & possesses only half the power. —

It is not satisfactorily known how the Opium is prepared in the Eastern countries. It is said, that incisions are made into the plant, from which oozes a milky fluid, which being collected, & inspissated by exposure to the sun for 2 or 3 days, is wrapped up in the leaves of the poppy & exported. —

The seeds possess but little of the narcotic power, & are used only in emulsion, & being very oily, are quite mild. —

– See Dr J. R. Coxe's paper on this subject in one of the early vol. of the Trans. of the Amer. Philos. Society.

†† for the mode of obtaining the narcotic principle, See Thompson's "Elements of Chemistry" page 250. – –

Opium, as we receive it, is of a brown colour, has a strong fœtid odour, and disagreeable taste. By filtration it is purified, & becomes of a shining black, like the Succus Glycirrhiæ. —

It is obtained also from lettuce, and is nearly as powerful, as that from the poppy.

Its constituents are Gum & Resin in nearly equal proportions, an oil, an earthy or Saline matter, and a substance not soluble in any of the usual menstrua. It has been asserted by a french Chemist of eminence, that a peculiar substance exists in it, giving it the narcotic power. It is obtained in prisms, white, inodorous & insipid; insoluble in Cold water & very slightly soluble in hot; but is soluble in alcohol, acids &c. (for the process, see last edition of Murray's Materia Medica.)

Alcohol dissolves the resin of opium, forming its most powerful preparation, Laudanum. The gum is dissolved by water, but the aqueous solution is much less powerful. Wine also takes up the properties of opium in a very considerable degree. Vinegar also, but this has no advantages over the other menstrua.

As respects the action of opium on the system, much difference of opinion exists, & the point has been warmly disputed, particularly between the disciples of Cullen and Brown. We cannot here enter into the consideration of this question, but will merely point out its most prominent effects on the system. —

In a moderate dose, it excites the action of both body & mind, increases the force & frequency of the pulse, produces hilarity &c precisely as wine does, & among the Eastern nations, whose religion forbids the use of vinous liquors, opium is used in their place, to inspire courage, to increase fortitude, to sooth sorrow &c. — After these first effects have continued some time, they are succeeded by symptoms of diminished action, for the most part terminating in sleep. —

By a large dose, debility and a decrease of action is produced without any previous excitement, or at least the excitement is so transient as scarcely to be perceptible. — If an excessive dose be taken, the system immediately sinks under it. — These effects of opium however are very much modified by the state of the system at the time of its exhibition.

Thus Opium may be given with very opposite views; as a stimulant, it is to be given in small doses, frequently repeated, & gradually increased. But to relieve pain, & produce sleep, full doses must be exhibited, and at distant intervals. — Opium may hence be employd in many diseases, but it requires caution and discrimination. — The indications, for which it is exhibited, are to excite the action of the system, to mitigate pain, induce sleep, and allay morbid irritation. We now proceed to the application of opium to diseases.

Continued Fevers. Every form of cont.d Fever, whether Synocha, Synochus or Typhus commences with inflammation, or at least with an increase of action; but when this has passed away, great prostration and debility follow (particly in Typhus) and stimuli are required; but in these low stages of fever, wine, volatile &c are preferred to opiates as stimuli; certain symptoms however arise, which require the use of opium, & of these the principal is Delirium. This arises from very opposite states; in the 1st stages it is caused by an increased action & opium will aggravate it. but in the low delirium, proceeding from want of action, & attended with extreme anxiety & inquietude, stimulants, & particularly opium, are our sole dependance. — When the Fever is accompanied with a dangerous diarrhœa, as often happens in the low stages, opium is a very valuable remedy, alone or with chalk.

the cretaceous mixture is made thus; ℞. Cretæ preparatæ ℥ij. Laudan. gt. xl. ... Ia — Aq. Cinnamom. ℥ij M. ℥ss. q. dimid. h. vel q. h. pro re natâ. — If the diarrhœa be very urgent, Tinct. Kino ℥i or ℥ij may be added to this mixture.

In the last stages of fever, nervous tremors & subsultus tendinum sometimes occur, & denote great danger; yet they are not fatal symptoms but require the plentiful use of stimuli; opium is in these cases to be given in large doses, as the susceptibility of the system is much impaired, and should be frequently repeated, in order to keep up the impression. -

Lecture 33d January 19th 1815.

The use of opium in intermit fever is by no means a novel practice, but was known to Galen & the Arabian physicians, who have all given their testimony in its favour; but its power has not till lately been fully investigated. – Given an hour before the expected accession of the paroxysm, it not unfrequently prevents it; But Dr Lind thinks it still better, when administered about half an hour after the commencement of the hot stage, & asserts that it renders the remaining part of the paroxysm lighter & shorter, the intermission more perfect, & that it prepares the system for bark, & is never followed by the chronic diseases, which so often follow intermits treated by bark. I have never used it in this manner, & should do it with reluctance; indeed all who have tried it in this city agree that it increases headache &c. Dr Lind however practiced in hot climates, where there is an disposition to sweat, & probably it acts as he says. I have met with one other author, who practiced within the tropics, who very strenuously advocates Dr Lind's practice. – Were I to use opium in the hot stage, it would be in the form of Dover's powder. –

I am next to enquire, how far opium is proper in the Phlegmatic. It is laid down as a rule, that it never should be used, while V.S. is required; this is generally true, and all allow, it would be improper in active inflammation, but it is often highly useful in what has been termed passive inflam.– In Pneumonia no one now thinks of administering opium, untill the inflam.n has been subdued by V.S. &c. – Thus Dr Cullen very judiciously says, "In the beginning of the disease "before bleeding and blistering have produced

"some remission of the pain, and of the difficulty "of breathing, opiates have a very bad effect, by increasing "the inflamm. symptoms; but in a more advanced "state, when the difficulty of breathing is abated, "and the urgent symptom is a cough proving "the chief cause of the continuance of the pain "and of the want of sleep, opiates may be employed "with great advantage" (1st Lines. art. Pneumonia)

These principles prove equally correct in all other pulmonary affections. — As opium alone tends to check the expectoration, it is usually combined with some of the expectorants, Ipecac, Squill, wine of antimony, g. am. ammoniac &c.

℞. Ext. glycirrhiz. ... ʒij
Vin. antimon. ... ʒj
Cliq. paragor. ... ℥j
Aq. flav. ... ℥viij.
M. ℥ss. q.s. vel b.h. —

J. arab. may be substituted for the liquorice. —

Or. ℞. Oxymel Scill. ... ʒj
Cliq. Paregoric ... ℥ss
Spt. Nit. dulc. ... ℥ss
Antimon. wine. ... ℥j
Water ... ℥viij.
M. — Ipecac may be substituted for the Oxymel Scill, & Laudanum for Cliq. parag. —

In asthma, & coughs attended with but little general excitement the lac ammoniac with Laud. is an excellent remedy, & may be prepared thus. Rub down g. ammoniac ʒij in water ℥viij. & add Oxymel. Scill. ... and Laudanum q.s. —

I have used the following preparation with great advantage in cases of extreme tightness, and difficulty of expectoration incident to the advanced stage of Phthisis, and the catarrhal affections of old people; ℞. Nitric Acid ʒij. Water ℥viij - mix pour this upon g. ammoniac ʒij, & triturate it gradually till dissolved, & then add Laudanum q.s. — of this ℥ss. q.h. vel q.s.h. - vel pro re nata —

Of the use of opium in Rheumatism little need be said; In the acute R. it is wholly inadmissible, & the cure is effected only by depletion. But if after this, pain continues with a little fever, a perspiration is to be excited, & kept up for 12 or 24 hours; and to meet this indication, nothing has answered so well in my hands as the Dover's powder — the rules for its administration are laid down in Cullen's mat. med. —

Opium given alone in acute Rh. never fails to aggravate the pain, and even in combination with Ipecac it does so, until perspiration is produced. There is a form however of acute Rh., in which opium may be used early; this is attended with extreme mobility and irritability of the system, & occurs particularly in women, and here opium alone or with bark will be found highly useful. — In the Rheum. of secondary Syphilis, opium may be combined with the mercury with advantage. As respects the utility of opium in Gout, Physicians are by no means agreed. In the acute and regular gout, opium must undoubtedly aggravate the disease. But Brown & his disciples contend, that Gout is always a disease of debility, & to be treated by Stimuli, & above all by opium. — this however is mere speculation. — In the atonic, retrocedent or what is called gout in the stomach, there is no doubt of the utility of opium, & it ought never to be neglected; but it must be given in very large doses, for so great is the loss of susceptibility that ℥i laudanum has been taken in a very short time with little impression. — It is best to combine it with vol. alk., Ether, ginger tea, spiced wine, hot toddy &c. —

In haemorhagies opium has been used too indiscriminately; In active haem. it is certainly improper, but after the action has been reduced, opium will be of great service in allaying irritation, and quelling the mobility of the system. In haemoptysis & epistaxis opium with ipecac has been much commended. — In floodings after parturition, large doses are highly praised by Dr Hamilton, and in a paper published in last Vol. Lond. Philos. Trans. (See Note in my edition of Burns'.)

In all the diseases of the class Neuroses, opium has always been a favourite remedy; but in my opinion, its value has been overrated. —

In Tetanus I have seen it tried without the least success, & in the West Indies, where the disease is common, it is now very little depended on – The few cases which have been cured by it were treated by prodigious doses; such was one in which grs 1500 were taken in 17 days, and another in which ℥xx of Laud. were taken in 24 hours – these both ultimately recovered, & of their authenticity there is not the least reason to doubt. they show the degree of inirritability to which the system is reduced. –

Of the utility of opium in Hydrophobia, I have but little to say – I think that when genuine it is incurable by any remedies hitherto known – but when symptomatic of certain diseases, it may be relieved – All that can be said of opium is, that it mitigates the symptoms.

In Chorea Sti Viti its use is very dubious. Sydenham speaks highly of it, but I doubt whether it is ever permanently useful, if not generally injurious.–

In ordinary Hysteria, it has been, I think, too much praised; it can never effect a cure, but may palliate some of the symptoms. the habitual use of opium increases the mobility of the system, & hence women who are in the habit of taking it in considerable quantities, are usually hysterical –

In Epilepsy I have not the least confidence in it; this, as well as most other nervous diseases, is either dependent on, or allied with gastric affection, and is to be treated by evacuating the 1st via by emetics and cathartics. Sometimes V.S. is necessary, & topical bleeding, when inflamd action, or determination to the head exists. It is the practice of Dr . . . to give an emetic, as soon as the premonitory symptoms of an approaching fit appear, and he is said to prevent the formation of it, & in some cases to have cured the disease –

In mania opium has been much used & with but little discrimination. So long as any general excitement exists, opium is not admissible, but V.S. purging, and cold to head &c. but in the weaker forms of mania, or after the system has been reduced by V.S. &c opiates are very serviceable. — But it is more particularly useful in puerperile mania, & mania a potu. — Not more decided power can be obtained from any medicine, than from opium in the latter form, especially if combined with Camphor. They must be given in very large doses — gtt iij opii with Camphor gtt x. q.h. vel q.s.h. untill tranquillity is restored to the system. It is sometimes necessary to push the opium as far as 100 or 120 grs a day. By this practice, not a single patient has been lost in the Asylum, tho' by the treatment formerly used there, they were seldom saved. (by V.S. &c) —

(Dec. 20th: In questing) medium dose of opium gr j.

Laudanum ℥ss XXV. = Opium gr j.

Elixir paregoric is made in different ways: the Tinct. Camphorae compos. of London Pharmacopeia contains grs ij opium to ℥i of alcohol. Whereas the Tinct. opii ammoniaca of Edinbg contains gr j to ℥i. — In this country the former is generally used; but ℥ss is by no means a small dose, for the other articles give the Tinct. additional force, & ℥i of Elix par. is much more than equal to gr 1/4 opium.

For a child three days old, gt j Laudanum is to be mixed in ℥i water, & half of it taken; & after sometime the remainder if necessary. but even ½ drop sometimes produces violent effects.

At no time within the month ought more than one drop to be given at a dose. —

Elix parg. is to be given in proportionate doses — perhaps 5 gt. to child 3 or 4 days old. —

Lecture 34th January 20th 1815.

As to the external application of opium I have but a few words to say; experiments have been made here & elsewhere, which go to prove the inefficacy of this practice. Dr Henry Jackson has shown that a large quantity of opium may be worn without any effect; this has been repeated by Dr Rouppian, Dr Smith &c.

Opium is often used in enemata; for this purpose it is to be entangled in mucilage of g arabic, Flaxseed tea, or starch. as the enema is intended to remain some time, the smaller the quantity of mucilage, the better. ℥ss of some one of the above with ʒi Laudanum. As a general rule, twice as much is to be administered in enema as would be required if taken by the mouth. thus if ʒi Laud. appear requisite if taken into the stomach, ℥ij are to be given in the enema.

No medicine loses its power by habit more than opium; I have known a person take ℥vi Laud. a day. and a well authenticated case occurred in this city under Dr Mungo & Dr Laroche, in which the patient took three pints of Laud. a day for some weeks; it was a case of Cancerous uterus, & the woman drank the laud. like beer by tumblefulls.

Volatile alkali or more properly Carbonate of ammonia is next in importance to opium as a diffusible stimulus.

It is used in some form in almost every febrile affection, but is peculiarly adapted to the low or nervous fever. — I remarked some days ago that in the early stage even of Typhus fever there was some increased action, & here the vol. alk is inadmissible; the treatment must consist in moderate purging, & diaphoretics — But afterwards, when the more truly Typhus state comes on,

— Dose of Aq. ammoniæ a teaspfull. Of Spts minderer, ℥ss.

vol. alk. alone or with wine is our most decidedly useful remedy. — the general dose is about gtt V. q. 5. h. but I have given as much as gtt X. q. h. & even q. dimid.a h. — As its effects are very evanescent, perhaps more so than those of any other medicines except ethereal preparations, the doses must be small & frequently repeated. It may be given in pills, or preferable in julep. — ℞. Carbon. ammon. ℥j. — g. Arabic ℥ij, Saech. alb. ℥j. Aq. font. ℥v. — m. ℥ss. q. 3h.

The vol. alk has been used in intermittents, and is said, when given before the period of accession, either to prevent the paroxysm, or to mitigate its violence. I have never imitated this practice, but I use the Spt. Mindereri very much in the hot stage as a powerful diaphoretic. —

In Remittents the vol. alk is used, whenever there is any tendency to Typhus.

It is also used in some of the Phlegmasia. Even in acute Rheumatism by some of the British physicians it is given before depletion; but this would not do in this country. I have used it in Chronic Rh., but from my own experience should greatly prefer the vol. S. Guaiac, of which it forms an ingredient.

Extraordinary as it may appear, the vol. alk. has been much extolled in Pneumonia; I am informed that as late as 30 years ago, it was usual in this city to treat pleurisies by one V.S. & then the vol. alk, & Polys. Senega, as expectorants. Either this disease has changed very much since that time, or their treatment must have been injurious. — But a species of Pneumonia exists, incident to the inhabitants of low marshy grounds, which will not bear more than one bleeding, & often requires the vol. alk. — Also in the Pn. notha of old people, we are compelled to use stimulants, and none are so good as the Carb. ammon. with opium.

Of the Typhus Pneumonia, as it has lately appeared in this country, I have already spoken, & shall again have occasion to treat.

In the remnants of a Pneumonia or the prelude to Phthysis, small doses of the carbonat of ammonia are very useful; & also as a palliative in the declining stage of Consumption.

Also in Asthma, pertussis, and the cough after ill managed measles; I have no experience in the two first, & very little in the last, tho' it is much praised here.

The vol. alk. is also adapted to some diseases of the alimentary Canal. It is said to be useful in Pyrosis, but I have usually treated this by restriction to a diet of new milk.

In Dyspepsia, particularly that of drunkards. In the Cardialgia of pregnant women; for which I use the following ℞. Aq. Ammon. & Calc. magnesia aa ℥j. - Aq. Cinnam. ℥ij. Aq. font. ℥vj. M. ℥ss. whenever the uneasiness appears; & by taking a dose after each meal, its recurrence will be prevented, the acid being immediately neutralized.

In the Sick headache of sedentary persons, the vol. alk. will often give immediate relief, & by a continued use of it, a complete cure will sometimes be effected.

In irregular gout, arthritic colic, cardialgia &c the symptoms are more readily relieved by it than by any other medicine.

In Dysentery it relieves griping & tenesmus; I cannot say this from my own experience, but should presume it might, in the last stages. In Chronic diarrhoea, with opium it is very useful.

It has been recommended in almost every one of the diseases of the class Neuroses; but I do not know it to be useful in any, except as a palliative in Hysteria.

In France it has been lately extolled in apoplexy, but I can place no confidence in this; if ever it can be so, it must be in the gastric apoplexy, from debauch, drunkenness &c.

There is however a form of palsy, in which our medicine is highly beneficial - it is that, which is the offspring of Rheumatism & in which the muscles, by long continued pain, have lost the power of contraction. It is scarcely to be distinguished from genuine palsy, except by the pains occasioned by changes of the weather. This disease is only to be treated by vol. alk. &c. -

The vol. alk. is said to be useful in Dropsies as a diaphoretic.

In mania a potu it is by some preferred to opium & Camphor; but I doubt the justice of the preference -

In Cancer it has been used internally and externally; Cures have been reported, but as subsequent experience has not confirmed them, I must doubt its efficacy.

In bites of venomous reptiles - on this subject there is much difference among physicians. It has been extolled both in the East & West Indies; & large doses are recommended internally, while the part is bathed in a solution of caustic alkali. - I can say nothing of it from my own experience; but have used it often for allaying the pain of the stings of wasps &c, bathing the part with the aq. ammon.

These are the principal diseases to which the vol. alk. is applicable; tho' it may often be indicated by certain circumstances in other diseases, which are to be determined by the judgement of the Physician. -

—(The Camphor is obtained from the L. Camphora by distilling the wood with water in large iron pots, in which there are earthen heads filled with straw; the camphor sublimes & concretes upon the straw in the form of a grey powder. It is afterwards refined in Holland by a second distillation.

There are several species of Camphor, which differ very considerably from each other; the most remarkable are the Common Camphor, obtained from the Laurus Camphora, the Laurus Sumatrensis, & L. Cinnamomi — 2°. the Camphor of volatile oils, obtained from oils of thyme marjoram, cardomum, amomum Zingiber, laurus Cassia &c — probably from all labiated plants — and 3°. the Camphor obtained by treating oil of turpentine by muriatic acid ... Thompson's El. of Chemistry. Page 257-8.—)

Camphor is not a gum or resin as is generally supposed, but a peculiar principle in vegetable composition. It is principally procured from the Laurus Camphora, & brought from Japan; but may also be obtained from Rosemary, mint, sage, Sassafras & almost all of the aromatic herbs. In the L. Camphora it exists in distinct grains, & may be scraped off; it is purified by sublimation. It is a white semitransparent & brittle substance, oily to the touch, with a peculiar aromatic odour, & a strong hot acrid taste. It is insoluble in water, (tho' it communicates to it its odour) but is readily dissolved in alcohol, ether, oils, acids and milk.

Untill recently it was considered as a sedative, but it is extraordinary how this opinion could be entertained, for no medicine evinces more evidently stimulating effects than Camphor. In a small dose it produces excitement; and if pushed very far, convulsions, delirium & death; in these respects, resembling the narcotics. It was at one time very much used, but is now much less so, & is too much neglected in the practice of this city.

Camphor is useful in every modification of febrile disease, but particularly in the low states, in which it is by some preferred to the vol. alk. — both are no doubt admirably adapted to meet the indications in such cases, & I generally use them alternately, in order to avoid their losing their power by the system becoming habituated to either. — In the Typhus fever, which is now desolating many parts of our Country, I have used Camphor in combination with opium & Ipecac. ℞. Opiid Ipecac āā grs vj. Camphor gr. XXX. m. ft. p. vj. — of which one is taken every 2 hours or oftener; this keeps

a constant moisture on the surface, quiets nervous irritation, and diminishes delirium — I have even found this combination preferable to the vol. alk.

In what were once termed putrid diseases, Camphor was much celebrated, as an antiseptic. thus in Gangrene it is recommended by the German physicians to promote separation of the slough, & is used internally, & externally, by sprinkling the powder on the part, or bathing it with the tinct. — But it is less used for this purpose, since the discovery of the efficacy of blisters in arresting the progress of gangrene. however it is often necessary to support the strength, & this is best done by combination of bark & Camphor. The same combination is also excellent in obstinat intermittents.

Camphor is also strenuously recommended both internally & externally in indolent ulcers; I have never used it, but the practice seems plausible.

In Fevers of the eruptive kind, it has long been celebrated, to promote eruption, & to bring it back, if it has receded. In the confluent smpx it is used to promote the filling of the pustules, and to change the type of the fever. — Rosenstein asserts, that if a part be bmeared with camphorated liniment, the eruption will not appear there, & hence he recommends it to guard the eyes from the eruption of smpx & by this means, & the throat by gargles of Camphor. — these observations have not been confirmed, but he is so good an authority, that we may credit them. —

By Hoffman and his Cotemporaries, who supposed Camphor a sedative, it was used in all inflammatory diseases; but I suppose the practice was as injurious, as the theory was erroneous. However after action has been reduced, Camphor may be used in combination with Ipecac & opium, or with nitre; these are eminently useful in Pneumonia & Rheumatism, after proper depletion. —

Much has been said in favour of Camphor

in Puerperal fever, and it has been used in every stage, and certainly not without injury. Much difference of opinion exists with regard to the nature of this disease. Some consider it as a pure inflammation and deplete accordingly, while others maintain it to be a Typhus, & treat it by stimuli. The opinions are equally various with regard to its seat. My own belief, which is supported by dissection, is, that the origin of the disease is an irritation of the uterus, which spreads more or less to the cavity of the abdomen. So long as the peritoneum is not attacked, the disease is purely inflammatory, but as soon as the disease spreads to this membrane, a new set of symptoms appears, tension of the abdomen, & great sensibility to the touch, pulse quick & small, tho' tense and corded; anxiety, nausea; towards the decline of the disease, violent vomiting of a dark thin matter resembling coffee grounds, tremulous pulse, low delirium, and a peculiar haggard aspect. – On dissection the peritoneum exhibits the blush of Erysipelatous inflammation. Peritoneal inflammation is always extremely difficult of cure: V.S. is of no service, except perhaps at the very commencement; emetics in the beginning, & after them, blisters, Camphor &c. – But in puerp. f. when the inflam: is confined to the uterus &c, & does not attack the peritoneum, the treatment must be purely antiphlogistic. –

In all spasmodic diseases Camphor has been much used. In Epilepsy, combined with the Cuprum ammoniacum, the Flores zinci, or the sulphate of Zinc. – Many cases of Chorea have been recorded, cured by Camphor, but its reputation in this dis. is now not considerable. In Tetanus, half a century ago, it was much used, & lately has been again recommended on the continent of Europe. – In Hydrophobia it is

quite inefficacious, & tho' it has been much praised in spasmodic asthma, I suspect it is not worthy of much attention. Thus, tho' it has been celebrated in all the nervous diseases, from my own experience I should say it was of very little value in this class.
There is however one affection, depending somewhat on spasm, in which Camphor is highly useful, viz. in difficult menstruation, sometimes using also the warm bath & V.S. –
In strangury it is undoubtedly useful, but large doses produce a most distressing strangury.
In Gonorrhœa with chordee & other symptoms of irritation, I have found much advantage from an injection made thus: ℞. Opiij, Camphor ℈ij. viij. Water ℥ij or iij. M. – – The same, diluted, forms an excellent collyrium in ophthalmia with a morbid sensibility of the eye. –
In mania, it has been too indiscriminately used. It ought of course to be avoided in the inflammatory forms, untill action has been reduced by V.S. &c. then opium & Camphor will reduce irritation, & procure sleep. But sometimes mania is purely an affection of the mind, the system not sympathising at all; as that from grief, or from religious melancholy. here Camphor & opium with blisters, & the alternate use of the warm & cold bath form the best treatment. the patient is to be taken from the warm bath, & plunged immediately into the cold, in order to give a sufficient shock. –
In Nymphomania, Camphor has been said to be useful, & I doubt it not; for this disease depends on irritation in the uterus, & this medicine has a peculiar relation to that viscus. The disease however generally commences with plethora, & of course depletion is the 1st object. – Nymphomania is often accompanied with amenorrhœa, & disappears with the return of the menstrual discharge.

In mania a potu stimulants are our only resource, and of all, the best I have used, are Opium & Camphor. I use them in large doses untill the patient becomes composed, & then he is to be supported by nourishing diet, & cordial drinks. We are speaking here of mania from habitual drunkenness, when the constitution is broken down; but in stronger habits, the plan is to be somewhat modified. —

Camphor is used externally for bruises &c as a liniment, dissolved in alcohol, alone, or with oils & Laudanum — It is also an ingredient of one of the mercurial unguents. —

Camphor is given internally in various forms — in substance, but its bulk is objectionable, and it is more apt to nauseate than in other forms. — It may be dissolved in water by adding a few drops of alcohol. —

℞. Camphor ʒj. g. myrrh ℥ss. — Sacch. alb. ʒij
Water ℥viij. v. ℥ss. q. s. k. —

but the solution in milk has of late superseded all other forms. — (In Seltzer water. 1817)

Dose in substance is from grs V. to grs X. often necessary to give ʒij or ʒiij in 24 hours. —

Hyoscyamus niger, or black henbane is not a native, but grows abundantly in this country. Every part of the plant is active, the root even more so than the leaves, which last however are the only part used. – The inspissated juice of the leaves is given in doses of gr iij or iv increased to Gtt. xxx. a day – the dose of the powdered leaves is the same. – Its effects on the system are very similar to those of opium; like it, it excites the action of the whole system, and in overdoses, produces delirium & convulsions. Being so analogous to opium in its effects, it has been proposed as a substitute for it, & it is alleged that it possesses the anodyne power without inducing constipation – I have used it, but have never observed any remarkable soporific effect, otherwise than by quieting irritation. – – It has been much celebrated in the whole class of Neuroses. In mania, Epilepsy &c. – – Also in scrophulous, cancerous & schirrous tumours, used both internally, and externally. The following article however possesses the same properties, & is decidedly superior in efficacy.

Conium maculatum, or Cicuta, in its general effects is very similar to the Hyoscyamus, it is not indigenous, but flourishes well here. No part of the plant is inert, but the leaves only are used – they are dried & pulverized, or an extract is made from them. Conium was known among the ancients, & used as a mode of inflicting the punishment of death, as in the instance of Socrates. But its medicinal properties were first made known by Baron Storck, who recommended it highly in cancer & schirrus; and at one time, it was confidently expected to prove a cure for cancer. –

though it will not cure this disease, it is an excellent palliative & should be used internally in large doses, and externally, washing the ulcers with an infusion of the leaves, or applying a poultice of them.

It is used in the same way & with equal advantage, in other ulcers of a morbidly irritated nature.

In Scrophulous swellings it is an excellent remedy, especially if combined with minute doses of Calomel, & used also externally.

The only cases of schirrus I have seen relieved were under the use of Conium, & all cases of Schirrus testicle. This however is a very rare disease; most of the cases generally considered as schirrus are nothing but Scleroceli, described by Ramsden, and depending on irritation or stricture in the urethra, & cured by bougies. See Ramsden on dis. of testicle.

In ulcerations of secondary stage of Syphilis, Conium in large doses is often very useful; & also in some buboes, which refuse to heal under the use of mercury.

In some obstinate diseases of the skin; one case of leprosy was cured in this city by Conium; & I have witnessed its success in some cases of obstinate herpes. It is also said to be useful in Elephantiasis, a species of Lepra.

In Chronic Rheumatism I have used it in union with mercurials; & this combination I have found to determine to the surface, and relieve pain. The same in the last stages of Pneumonic inflammation. In pulmonary affections I often use it in the Mucilaginous mixture in lieu of Laudanum.

In Asthma it has been much celebrated, but the particular form, to which it is adapted, has never been distinctly pointed out. It appears to me best suited to the Spasmodic asthma.

Conium was once much used in Pertussis, but has now lost its reputation. Baffled by my attempts to cure this disease, I have resorted

— Since writing this lecture I have used H. Conium with complete success in some cases of Chronic & peculiar inflam. of throat, which had lasted for years.

to the Conium, but have found it to allay the cough, but without any permanent impression on the disease.

In the Neuroses, I believe, physicians are now well convinced of its inefficacy. It has been however recommended in Tic douloureux, & Fothergill relates cures by it. Dr Jackson of Boston has also published several cases in which it succeeded completely. (See his paper in the Boston med. Journal.)

In Mania of every variety, it has been much celebrated; I can say nothing of it from experience, but suppose it must be submitted to the same rules as opium. It is said to be adapted to puerperal mania & M. a potu; but it must be inferior to Op. & Camphor.

It has been recommended in glandular obstructions, particularly in Icterus & Amenorrhœa. I believe it will be found useful in that form of Jaundice, which depends on obstruction of the biliary ducts, & I give it in the following form. ℞. Ext. Conii. ʒij. Pulv. Rhei ʒj. Gum Ammoniac. ʒi. Sap. venet. ℥ß. M. ft. pill. 50. of which ij or iij t. d. The Gum ammoniac is a very powerful deobstruent. The same formula in Gastrodynia, Dyspepsia, Amenorrhœa &c.

Conium however displays its best powers in Schirrus, Cancer & Scrofula: in these diseases, it is inestimable; for no other medicine produces the same effects; & I enforce its value the more, because Cullen & others have denounced it, & because it is too little used.

I commence with gr vj or viij of the ext. or dried leaves t. d. & increase the dose to ʒij a day. If it produce giddiness, nausea &c, I intermit it for a day or two, but I always increase it till some sensible effects are produced. — its failure depends on the bad quality, & the small dose.

We come now to an article, said to be the most powerful of the narcotics, the Atropa Belladonna, or deadly nightshade. a native of Europe, particularly abundant in Italy, but is not cultivated in any part of this Country; it is a perennial plant, growing in dark, and retired places. Every part of it is virulently poisonous, & it bears a fruit resembling a cherry, which is sometimes eaten by children; who are soon affected by thirst, a dry mouth, trembling of the tongue; anxiety about the precordia, without the power of vomiting; delirium with gnashing of the teeth, and most horrid convulsions; the pupils are dilated, jaws locked, & death soon terminates their suffering. - the body soon becomes putrid, with a peculiarly unpleasant odour. - On dissection extensive mortification is found to have existed. -

Yet this powerful article may be so managed as to prove an important medical agent. Besides its narcotic power, it increases the secretions, particularly perspiration, urine & saliva. - As regards the neuroses, it is now generally conceded, that it is not very efficacious, & that the praises lavished on it in mania & the comatose affections were ill founded. But it has been more successfull in Cancer & schirrus. Dr Cullen, who is proverbially sceptic with regard to medicines, & particularly those of this class, says, "I have had a cancer of the lip entirely cured by it; a schirrosity in a woman's breast, of such a kind as frequently proceeds to a cancer, "I have found entirely discussed by the use of it, "a sore a little below the eye, which had put on "a cancerous appearance, was much mended "by the internal use of Belladonna &c." Many other authorities might be adduced in its favour, and no doubt it has been useful; but either from

– Datura Stramonium – & Datura tatula both called Jamestown weed, & indiscriminately used –

caprice, or a dread of using so powerfull a medicine, it has been prematurely abandoned.
In obstinat Ulcers, it has been used internally and as a wash.
It is an active diuretic, and hence has been recommended in Dropsy, particularly that following intuitts, by Dr. . . Phys. general to the King of Prussia; but I know nothing of its powers. Nor can I say anything of it in intuitts, in which it has been used in lieu of opium to prevent the paroxysm.
Applied to the eye it dilates the pupil, and is said to bring forward the lens; & hence is used in preparing for operations on the eye.—
Lately it has been recommended by a German Phys. as a preventive & cure for Hydrophobia.
I have never employed it in any disease, but cannot but think it would prove a very useful medicine, & that it has been too hastily rejected from practice.
Dose gr ij or iij — t. d. — of the Extract, or dried leaves.
— Stramonium or James'town weed. thorn-apple bed. — it is doubted whether this be indigenous or not; but it grows abundantly in every part of our Country, on dunghills & other fertile spots. — In its operation on the system, it is one of the most powerful articles of the Mat. Med. and is closely allied to the other Narcotic Stimulants. Experiments prove it to act as a powerful stimulant, and it has produced Convulsions, mania, Tetanus &c. a curious account of its effects on a party of British Soldiers is related in Beverly's history of Virginia. it produced a kind of fatuity for 11 days, when they recovered without the least recollection of what had passed — from this affair it was called James'town weed. —

Every part of the plant is active; but the leaves & seeds are used, either in powder, or an inspissated juice or extract of the leaves. — Of either preparation the dose is gr ij. b. d. increased gradually — I have given to the extent of grs XXX or XL a day. — Lately a saturated tincture has been introduced, but I have never used it.

Stramonium was originally employed by Dr. Stock of Vienna in Mania, Epilepsy, &c in which he ascribed to it very extensive powers; but its reputation was diminished by subsequent experience, & Cullen speaks contemptuously of it. Since its revival, it has been used in a wider range of diseases — From my own experience, I should judge it not to be very efficacious in Epilepsy; but many assert the contrary, & among them none more warmly than Dr Archer of Maryland, who declares it to be as successfull in Epilepsy, as bark is in intermitts. Dr Lind in Europe, and Drs Barton & Fisher in this country have spoken more temperately of it. — On the whole, my confidence in it is but slender, tho' I would not exclude it from practice in this disease.

In Tetanus I do not think it promising much, tho' Dr Archer says it has cured it. —

During the past last year, it has acquired some celebrity in Asthma & Dyspnoea; yet I am inclined to think it is not very powerful in these cases. In Spasmodic Asthma I have mitigated the symptoms, but doubt if it produced any permanent impression on the disease. I may say the same of the dyspnoea in the latter stages of Phthysis. In these cases, I have directed the root, bruised, dried &c, to be smoked in a pipe. — Bree says, that when thus employed, it is always useful, & often dangerous, being more apt to affect the brain — My own experience teaches me otherwise, & its only effect I have found to be allaying irritation.

Stramonium has been most used in cases of mental derangement; but as it is a stimulus, whenever any excitement exists, it must be preceded by depletion, after which it is very effectual in calming the mind. but its action is not purely narcotic, for it produces often such permanent impressions on the disease as cannot be ascribed to its narcotic power. Hufeland, Berging &c extol it very much in these cases, & consider it the best of the whole class of narcotics. I have seen it given with varied success, but the practice has not been sufficiently discriminate to enable us to point out the forms of mania, to which it is adapted. It certainly is never proper in the active state, and I am induced to believe it best in the melancholia; tho' some say it is most efficacious in cases of mania combined with Epilepsy & tending towards fatuity. In all these diseases it is usual to commence with small doses, and increase it till some sensible effect is produced; as gastric distress, giddiness, disturbed vision, dilated pupil &c.

It is said to be useful in Rheumatism and Palsy; but I have not met with any decided instances of its success; I have resolved to try it in these & some other diseases in which I think it promises much, & among them are Amaurosis and Dysmenorrhœa. Indeed I find it is much used as an Emmenagogue in New England. –

It has been used as a substitute for cicuta in scirrhus, scrophulous & other ill conditioned ulcers.

It has not been much used externally; though the leaves steeped in brandy form a good embrocation in Rheumatism; & boiled in milk have been used in Gout, it is said, with great relief

An unguent is made by simmering the leaves in melted lard, which I have found very useful in herpes & burns, & it is said to be effectual in Psora. In piles, where considerable irritation exists, it is an excellent application.
It is said by its relaxing power to be successfull in Club foot, & a woman in this city gained some celebrity for curing clubfoot by this application. — I once saw it used with complete success, in a swelling of the knee joint resembling the white swelling. —
Prunus Laurocerasus, cherry tree laurel — this plant is not found in this country, unless in the hothouses: it was introduced nearly a century ago; if exhibited in a large dose, as a vinegar of all of the distilled water, it extinguishes life without a struggle — In a more moderate dose, it produces convulsions, tetanus, & all the effects of the narcotics. O'Kellen remarks that in lower or large doses, it never excites inflammation, and to this he ascribes the quickness & perfection of the recovery from its effects, when not mortal. As a medicine it is not much used, tho' in small doses it is said to lower the pulse, quiet irritability, & hence it has been recommended in Phthysis. Also in irritable gonorrhœa — In hypochondriac affections, it is said to invigorate the appetite, and raise the spirits. I have never used it, but think it promises much in Neuroses, & cancer, Schirrus &c. It is said to have been used in Germany in Hydrophobia with advantage.
The saturated tincture gt. v. to x. & the distilled water of the leaves which are intensely bitter; gt. xxx to xl.
Its narcotic power is very volatile & may it not exist in the prussic acid, which is found to abound in this & some other plants of the class? —

Numerous other narcotics might be mentioned here, but as they have no peculiar properties, it would be unnecessarily loading your memory with useless information.

I am next to bring before you a new set of medicines commonly termed Antispasmodics, a very vague name. — Spasm consists in an irregular contraction of the muscular fibre, ~~fraction~~ occurring both in a weak & low state of the system, as in Neuroses, & in a highly excited state, as in Colic, Convulsions from narcotic poisons &c. In the first case stimulants would be the antispasmodic medicines, & in the last, V.S. & other modes of depletion.

There are however some substances, which allay pain, & quiet irritation, without producing the narcotic effects, or causing sleep. They are more permanent than narcotics, and seem to form an intermediate order between narcotics & the more permanent stimuli. —

(Moschus moschiferus) The musk is one of the few medicines obtained from the animal kingdom; it is deposited in a sac near the umbilicus of the male Moschus moschiferus, an inhabitant of Siberia, Thibet, China &c somewhat resembling the reindeer, but belonging to a different Class. A substance similar to it is secreted by the Skunk or polecat, & also may be obtained from some Species of Geranium. It is imported in the Sacs & is of a black colour, having a bitter taste & a strong penetrating odour. It was at one time a very favourite remedy, & has been tried in all the spasmodic diseases. In Tetanus Dr Heberden used it combined with opium with no small success; & the West India writers also speak favourably of it.

In Hydrophobia, it has been used with opium & particularly with Cinnabar, at one time celebrated.

but in common with every other medicine, has failed to cure, or even essentially to mitigate this refractory disease. Nor has it been much more successfull in Epilepsy, Chorea & Tetanus. It has a beneficial effect in Spasmodic Asthma, palpitation, nervous agitation &c.
In Gout in the Stomach, it has gained much celebrity, & Dr Cullen speaks highly of it.
In various states of mental derangement, it is extolled by Hilary, & Dr Cullen speaks of it as the best of all the antisp.s, ~~in the first~~ edition of his Mat. Med. published from the notes of Dr Faulkner, but in the edition by himself, much valuable matter has been omitted, & in this he speaks with the less confidence in this remedy.
Musk was used in all low states of disease as early as by Dr Mead, who recommended it in nervous fevers, & no medicine has better maintained its reputation, or is given with more advantage than in Typhus, particularly for subultus tendinum, subsultus, low delirium &c. — Mr White of Manchester has recommended it highly in gangrene from wounds, with the hot alk.: a bolus containing X grs of each — — What I have said of musk is altogether from authority & not from experience, for it is seldom used here, on account of its impurity; it being very expensive, it is always adulterated. Dose grs X or XX. q. t. vel q.to h. — It may be given in bolus, but as it is unpleasant to the taste, it is best given as enema in children. —
Artificial musk, made by pouring nitric acid on oil of amber, has the properties of the genuine musk — it is generally diluted with alcohol for use. — Dr Paillin of London has very strenuously urged its use in Pertussis,

in this form; ℞ Artif. must. Grs. XV.
gum Arabic. Sacch. alb. aa ʒj. Aq. pur. ℥iij.
M. a teaspfll or two, q. d. h. according to
the age of the child.—
Castoreum, a substance obtained from
the Castor fiber or beaver, & secreted in two bags
near the rectum of both sexes. the best is
brought from Russia, but that in our shops
comes from Canada, & is very inferior.—
It was formerly in much repute as an
antispasmodic; Van Swieten & Detlaen
recommend it in Epilepsy; but it is now
only used by the followers of the old school in
Hysteria.— In powder, grs X or XV. or in
tincture ℥ij or iij — the dose.—
Asafœtida is obtained from the Ferula Asa-
fœtida of Linn. an umbelliferous plant re-
sembling our fennel. & growing particularly
in Persia. It comes to us in small grains of
different colours, whitish, reddish, violet & brown;
pretty hard but brittle; its taste is acrid & bitter;
its smell strongly alliaceous and fœtid. — By
keeping it loses its power. — it is decidedly the most
efficacious of all the fœtids.—
In all the Neuroses it is habitually pres-
cribed, & is indisputably serviceable in Hys-
teria & Hypochondriasis; but it is too feeble
to contend with Epilepsy, Tetanus, Chorea &c.
In many diseases of the alimentary canal
it is highly serviceable, particularly when
the powers of digestion are injured by the abuse
of intemperance. As it is laxative, it serves
also to keep the bowels open.
The preparation called the Gum pill is excel-
lent for old people, strengthening at the same
time that it empties the alimentary canal.
it is made thus: ℞. Asafœtid. Galbanum & Myrrh
aa ℥i — Ol. Succini ʒi. and Syrup. q. s. f. Pill.
ij pills are generally sufficient — (Dr Pugnick adds aloes)

— The watery sol. or Mistura fœtida is made thus ℞. gum fœt. ℥ss
Sacch. alb. ℥ij — Mucil. g. Acac. ℥viij — M. — ℥ss. q. t. ad

By some it is extolled in all diseases of the chest, and I can speak in the highest terms of it in spasmodic asthma —

In pertussis it is indisputably useful; the most successfull practice adopted in this city for Whooping Cough is purging on alternate days with calomel, till 30 drops have been taken & the attack somewhat broken, & then the watery solution of asafœtida is given with very great advantage. In severe cases, auxiliaries are called in, emetics, blisters & sometimes V.S.

Besides pertussis, it is very useful in some other coughs, and particularly in the secondary stage of catarrh, when a difficulty of expectoration & dyspnœa exist — Indeed whenever a stimulating expectorant is required, the watery solution of asafœt. is excellent, & no medicine answers better in cough after measles.

Asafœtida consists principally of a gum resin; & is given in pill, tincture, or in watery solution. the last is more prompt & less heating. dose gr x to ℥ x. — As enema, ℥ij or iij in ℔ j or ℔ ss. water — Dose of Tinct. fœt. gt. xxx. —

Allium sativum is a very valuable article; in its operation a diffusible stimulus & at the same time an expectorant, diuretic & occasionally a diaphoretic. As a stimulant it has been used by Bergius in intermittents, & he says with success, which I do not doubt, for I have seen decided effects from it. — It is a very common remedy among the vulgar in intermittents, & is taken in rum, not unfrequently curing the disease.

In dropsies it was recommended by Sydenham; I have no experience with it, but should suppose it must be useful in dropsies depending on weak action, and sluggishness of the urinary organs.

Dr Lind says it cures Scurvy.

As an expectorant, it is used in Asthma by

in Syrup or oxymel; it is particularly useful in the Tussis Senilis, where the lungs from mere debility become loaded with mucus. dose

Also in many complaints of the alimentary canal, & dyspepsia with flatulency; but in no case have I been more pleased with it than in a vertiginous affection which is very common, & not attended with any fullness, &, I presume, purely a gastric disease. The most usual mode of exhibiting it is to cut it into small pieces, which are to be swallowed — sometimes in pills, the juice is too nauseous. —

It is externally used, & Sydenham thought it the best of all ext. irritants to produce a revulsion & used it in place of sinapisms. — The poultice is said to resolve tumours, & I have used it on whitlows & felons. — the poultice is sometimes applied to the abdomen to expel worms. Frictions with the juice of garlic on the Spine of Children in Pertussis are a common remedy. In Deafness from Rheumatic affections of the head, it is introduced into the meatus; dipping a piece of cotton into the juice &c. —

Amber, a bitumen found on the coast of Europe, of a yellow or brown colour, sometimes transparent, & sometimes opaque. It is not used in substance, but by distillation an oil is obtained from it, which is sometimes tho' seldom used. The only case I have seen it useful in is Simpulitis, particularly in the Yellow Fever. — dose gtt. X or XV —

It is used as a liniment for Sprains & bruises. —

+ Hospital Rx. for blue pill.

Rx. Argent. viv. ℥iij } th. mercury to be trite:
Pulv. Rhei ℥ss. } rated with th. honey – then
Mel – q. s. – } add th. Pulv. Rhei – Each
pill to contain about 4 grs.

Sialagogues are generally divided into external or topical, & internal; but as the former, commonly called masticatories, are of no practical use, I omit them altogether. Tho'a variety of articles occasionally display this property, as arsenic, copper, lead, the narcotic poisons, the mineral acids, and above all the Polygala Seneca; yet their effect is so precarious & answers so little practical purpose, that mercury is justly considered the only real salivant. Hence I have been lead to reverse the order of sialagogues; particularly as the discharge is only incidental, not produced by all the preparations of mercury, & not at all necessary for their beneficial effects. As Mercury partakes of the properties of stimulants, & tonics, I have been induced to place it between these two classes.

Mercury is a metal, which is found in the bowels of the earth, sometimes pure & called virgin mercury; & somet. combined with various substances, from which it is purified by processes to be explained by the Prof. of Chemistry.

It is now admitted that mercury in its crude state has no medicinal property independent of its ponderosity. To fit it for our purposes, different operations are resorted to, & it is prepared principally in 4 ways; 1st by Trituration. 2d By Oxygenation; 3d Combination with Sulphur, & 4th by its union with the acids.

The first are very mild, & the mercury by long continued friction, is somewhat oxyded.

1st the Pillulæ Hydrargyri or blue pill - by triturating mercury with Conserve of roses, or some mucilage, until the globules disappear. the formula vary in different Pharmacopeiæ; but they are here usually made to contain gr j. each;

and two or three of them are to be given morning and night. The blue pill is one of the most gentle mercurials, & will not purge; yet it salivates as soon and as effectually, as any other. It is fully adequate to fulfill every indication, to which mercury is adapted, except that of purging. Hence it is much used in all cases where ptyalism is desired, & particularly in every form of Syphilis.

2d. Mixtura Hydrargyri mucilaginosa, or Plenck's solution. This is made by rubbing mercury with mucilage of G. Arab. & adding water; Zviij of the solution contain Zi mercury, & the dose is about Zi morning & night. It is mostly used as a gargle in venereal sore throat, a collyrium in syphilitic opthalmia & an injection in Gonorrhoea. My experience with it is but small, but I have used it in the cases just mentioned, & have found its effects unequal; I have derived most advantage from it in the Syph.c sore throat, & even here I think a solution of Corros. Sub. would have been equally successfull. It is however a favourite remedy among many, & perhaps is worthy a fairer trial, than I have been able to give it.

3d. Hydrargyrus Cum Creta. Three parts of Crude mercury are rubbed with 5 of creta; & the dose of the compound is grs XV. or grs XX. a day. It was supposed, from the creta contained in it, to be adapted to cases, where there was a tendency to diarrhoea; I have never used it, & I believe the blue pill has entirely superceded it in this city.

4d. The Mercurial ointments, the Ung.m Mitius & Ung.m fortius; the former is made by rubbing together one part of mercury, one of suet, & 3 of lard, till the globules disappear. The latter (fortius) by rubbing equal parts of all. As this operation is very tedious & operose, various substances have been added to facilitate it; the Spts Terebinth; but this renders it too acrid and irritating to the Skin; Flores Sulphuris, but this weakens the ointment; Rancid olive oil facilitates it very much & perhaps

-(Rancid oil must render it irritating, for when th ung.t becomes
oli, & th lard rancid it is much too acrid, at least for blistering Surgery
(A piece of well rubbed oint.t will answer very well to & Physick
facilitate th trituration of a new batch. — D.P.)

does not injure the ointment; but nothing answers so effectually as a small quittance of Rhubarb, a few grs to the ℥i of merc. ointment.

In the mag.: the mercury exists partly in a state of extreme mechanical division, partly oxydated & partly united with sebacic acid, or as sebate of merc. The oxydation of the mercury was long doubted, but it is now certain that the efficacy of the ointment is greatly dependent on the oxydation of the metal.

There are two modes of using the ointments, 1°: by injection; ℥i of the mag. forting is mixed with mucilage of gum arabic for an enema; this mode is only used when an immediate effect is desired. The other mode is by rubbing it on the surface, as on the insides of the thighs, ℥ij or iij to be used at night, & again in the morning, where expedition is required — In ordinary cases less will answer — When an immediate effect is desired, the ointment is to be rubbed in the axilla, & all other porous parts of the surface; mercurial socks, or drawers of flannel lined with mag.: or the use of mercurial sheets. But except in desperate cases, this free use of the merc.: should not be resorted to, as it might bring on such a state of the system, if it did not kill, as would render life miserable. However the only case of confirmed Hydrocephalus I am convinced I ever cured, was submitted to this profuse mercurial practice. Dr Vistar saved the life of his own child by it.

It is sometimes impossible to administer mercury internally, either on account of its purging, or other circumstances; and sometimes the largest doses are inert & will fail to salivate; what the state of the stomach &c is in these cases, I do not know; but the unguent externally applied will often succeed after the failure of the internal merc.:

How mercury acts on the surface is a matter of controversy; It is generally supposed to be absorbed by the skin, but others assert that it is inhaled into the lungs & there produces its effect. facts are adduced in support of each opinion; On one side it is said

that a glove very generally protects the one who rubs, while the patient on whom the ointment is rubbed, is salivated. On the other hand, it is as well authenticated that the effluvia from mercury often produces complete ptyalism; thus I have known patients to be salivated by being in the same ward with those who were taking it. Persons concerned in manufactories are salivated by the effluvia often from a very moderate trituration. An unequivocal instance is related in the (Philos. Trans. of Edinbg.) – A ship of the line, at the siege of Cadiz, having some casks of mercury on board, one of them burst & the mercury was poured into the hole; by the slight trituration of this merc. from the motion of the ship, the whole crew (300) were salivated. But these facts do not militate against the doctrine that medicines do not generally act by being absorbed; for all must admit that absorption does take place under certain circumstances, as by relaxing the surface by the warm bath or fomentations, or by friction insinuating the substance under the scales of the cuticle. But does the mercury act by entering the circulation, or merely locally? My most deliberate opinion is that when any substance is applied to the skin, it produces a local action, & by an association of motions, this effect is communicated to other parts of the system.

Lecture 40th January 31st 1815.

In combination with Sulphur, mercury forms two compounds; the 1st is the black Sulphuret or the Ethiops mineral & is formed by triturating equal weights of mercury & Sulphur — this is the most inactive and useless of all the preparations of mercury. It has been praised however as an alterative in glandular and cutaneous affections, & as an anthelmintic, but I have never found it of the least use — the dose generally laid down is from 5 to 10 grains; but I have given a tablespoonfull without effect. —

The 2d is the Sulphuretum rubrum, or factitious Cinnabar; in contradistinction to the native Cinnabar — This red Sulphuret is made by rubbing 5 parts of mercury with one of Sulphur, the latter being in a state of fusion & the mixture is then sublimed; by this process the mercury & Sulphur are more intimately combined than in the former preps., but it is yet nothing but a Sulphuret. It is used as a pigment under the name of vermilion. — This preparation was once used in cutaneous and gouty affections, & combined with musk & camphor formerly celebrated Chinese remedy for hydrophobia, mentioned above (Lect. p. 175.) The dose is from grs X to XX. — There is no material difference between the native & factitious Cinnabar, except that the former is less pure. —

Neither are now used internally, but they are employed in fumigations. This is among the most ancient methods of impregnating the system with mercury, but from some cause it was laid aside. Mr. Abernethy however recommends it, & I have seen him use it with signal advantage. The advantages of this mode are that it succeeds in

producing ptyalism when all other means fail, and it is far more expeditious than any other mode. Also like the inunctions it may be used, when internal mercury are inadmissible. Mr. Abernethy has contrived a bath for the purpose of conveying the fumes to the body; & has produced salivation in some instances in a few hours. He says he never failed in this way of effecting a radical cure of syphilis. But Mr. Pearson thinks it more dangerous than the other modes, & finds it difficult to introduce in this way sufficient mercury to secure the patient against a recurrence of the disease. Mr. P. found that the gums became tender sooner, & the local symptoms more quickly disappeared under the use of fumigations than under the other modes; but they often produced such a degree of debility & so profuse a salivation, that he could not proceed with the cure. — Of course he concludes that this mode is not eligible in general practice, tho' he allows that it may be serviceable, when a sudden & immediate checking of the disease is required, and when the local affection is so extensive as scarcely to leave room for inunction. — Yet Mr. Abernethy asserts that there is no danger of a relapse, and I have certainly seen the most signal advantage from this treatment; tho' I have never used it, nor do I think it has ever been used in this city. — Mr. Pearson in St. Lock Hosp. had to deal with the worst cases of syphilis, while Mr. Ab's practice being wholly private, his patients probably required less mercury than Mr. P's. —

Tho' the general use of fumigations has not been practised here, yet the topical application of fumes in indolent ulcers, whether from a venereal taint or from other causes, has been used with great success. In all warm climates the prepuce, glans penis & the vicinity of the anus, are liable to a disease very much resembling Chancre, continuing sometimes a year or two, & arising without any venereal taint; this is very readily cured by topical fumigation.

also ulcers in the fauces are very common here & often resist every other treatment except fumigation. Some cinnabar is to be thrown on the coals, & the fumes are to be conducted to the fauces &c by a funnel & tube.—

The oxyded preparations are of but little importance; the red oxyd or hydrarg. calcinatus is made by exposing mercury to an intense heat, & is sometimes used internally in dose of grij. b.d. This was Mr. Hunter's favourite in the venereal disease, but is so harsh, that it is now almost abandoned.

The preparations by acids.— 1° Hydrargyrus nitratus ruber, or red precipitate is prepared by dissolving mercury in nitric acid, evaporating the solution to dryness, & heating the dry salt almost to redness gradually in a crucible — the nitric acid is thus mostly driven off; some probably remains, & hence this prep.n is more active than the red oxyd mentioned above. — It is never used internally, but is employed to cleanse ulcers, & stimulate them to action, as an escharotic for exuberant granulations, & with lard, it forms an ung.t used for various purposes.—

2° Oxydum Hydrarg. cinereum or grey oxyd — To a diluted solution of nitrat of mercury, add aqua ammonia, & wash the precipitate & then dry it. — This oxyd is given in the secondary stage of syphilis, & is supposed peculiarly efficacious. It is said to be less apt to disturb the stomach & bowels than the other preparations, & I think the assertion is well grounded. — grs ij or iij — b.d. —

3° With sulphuric acid, the Subsulphas hydrargyri flavus or Turpeth mineral — Equal parts of mercury & sulphuric acid are boiled together in a close vessel to dryness — the result is a flaky matter, which by washing with water becomes a yellow powder — We have spoken of this preparation among the emetics.—

4° The Calx hydrargyri alba; an ammoniated submuriate of mercury; It is only used externally — the ung. Calcis Hyd. albæ, ʒj of this salt to ℥j Lard, for obstinate eruptions, herpes, & Psora. —

5th the corrosive sublimate or muriate of mercury. this is a most virulent preparation, & is given in doses of 1/16th or 1/8 of a grain & not safely more than 1/4 gr. nor ought more than one grain to be given a day. It is given either in pill or in solution in alcohol; the last is preferable, as the dose may be more precisely measured. ℞ Corros sublim. grs ij .. Alcohol ℥j. m. for a child one year old gt. iv. — for one two years old gt. vj or viij. & for an adult gt. xxx. — It is used externally as a stimulating escharotic for chancres, cutaneous eruptions, also as a gargle, collyrium &c. — But it is particularly in the secondary stages of syphilis, that it is most used as an internal medicine. — Mr. Pearson says that Calomel is much more to be depended on for the cure of syphilis than Corros. Sub., the latter is peculiarly adapted for relieving pains, ulcers of the fauces, & promoting desquamation in cutaneous syph. affections; but if it cures them, it does not secure the patient against other venereal symptoms. The result of Mr. P's experience is that the blue pill and Calomel are by far the best mercurials in syphilis, & ung.t made with other preps.s will not operate so quickly or surely as the common ointment. Many very respectable authorities however are in opposition to Mr. P. & many consider the Cor. sub. as decidedly preferable in every form of venereal disease. thus Dr. (Locker) of the Syph.c Hosp. of Vienna says he cured in the space of 4 years upwards of 4000 patients by Corros. sub. alone, without ever producing salivation, or any unpleasant affection of the system. Dr Horack also of N.Y. uses nothing but Corros. sub. I believe that in the 1st stages, Calomel is preferable, but in the 2.nd stages Corros. sub. is indisputably better than any other preparation. — It forms the basis of the remedies of the Empyrics, who cure with it without inducing a salivation.

6th Calomel or Submuriate mercury. of this we have already spoken under Cath.s, & other heads.

Lecture 41st February 7th 1815.

We are now to treat of the application of mercury to the treatment of diseases. — no article of the Mat. Med. possesses such various powers, & there is scarce a disease to the cure of which it is not sometimes applicable; but I shall limit my views to the most important.

It was first introduced by the Arabians & restricted to cutaneous affections, in which it was used only externally in form of unguent. It was soon after introduced in lues venerea, some contend, by Empirics; but I think it can be pretty distinctly shown, that it was brought into practice by regular physicians, who were probably lead by analogy to its use in syphilis, from its good effects in ulcerations &c. —

So much has been written on the use of mercury in syphilis, that we need not dwell on it; yet I must make some few remarks. Contrary to a very general opinion, I am confident that the venereal disease is rare, & that not more than one third of the patients, who apply as venereal, are really so. — In all warm climates the secretory surfaces of the organs of generation are apt to take on a morbid condition, producing ulcers, so similar to chancres as often to be mistaken for them; the same disease state is also produced by the acrid discharges of the vagina, & the washes of the courtezans, when the penis is exposed to them by the act of coition; the secretions of the glands may become acrid & produce the disease — these ulcers run the same course as chancres, & among other analogous symptoms, produce inguinal swellings or buboes. — this affection was probably the origin of the Moraic law of circumcision.

Though this similitude in some cases exists to a great degree, yet there are generally some marks by which these ulcers may be distinguished from venereal ones. - they are less retorted at their margins, more shallow, more rapid in their progress, & pour out more abundantly an acrid discharge. They generally yield to astringent washes &c. but if not, the remedies alter their appearance, so as to make it no longer ambiguous. Mercury internally seems to aggravate them, & the best treatment is to apply caustic, & then wash them with a solution of corros. sub. or brandy; after the eschar is removed. - calomel sprinkled on them. - if phagedenic, wash them with a decoct. Peruv. bark or diluted Tinct. Myrrh - but our dernier resort is the use of topical mercurial fumigations, by cinnabar &c. - It has been customary to treat them by the mercurial ointment, but my own experience would lead me to think this practice injurious. There are many other affections resembling syphilis, but we cannot treat of them here, & I am the more willing to omit them, as I can refer you to Mr. Abernethy's full account of Pseudosyphilitic diseases.

As to the mercurial treatment of the venereal disease, I shall only offer a few remarks. My own experience has satisfied me, that it has been wantonly used. A slight salivation is sufficient in recent cases, & is more effectual, when produced by small quantities of mercury gradually introduced, than when the condition of the system is suddenly changed by a large quantity. -

In many cases, the local disease, viz Chancre, may be cured without mercury, by a persevering use of topical means. Several days, sometimes ten or fifteen elapse from the appearance of the chancre, before the system is contaminated; and during this interval we may safely trust to topical applications. Impressed with the persuasion that there is no absorption of virus, I have often, when a considerable chancre & bubo existed, neglected the internal use of mercury, & treated the chancre locally; & when this has healed, the bubo has been dispersed. In these cases the bubo is merely a sympathetic affection with the chancre. But the cure depends greatly on the proper dressing of the penis. We must avoid attrition by the play of the prepuce over the gland, & for this, the prepuce must be kept back by strips of adhesive plaister; & the chancre is to be dressed with weak precipitate ointment. A recumbent posture, or at least an abstinence from all exercise is essential.

The vulgar notion of the system being saturated with the venereal virus is the cause of the wanton employment of mercury, by which a disease is induced worse than syphilis, & very properly called the "Mercurial disease". My own practice is to keep up in ordinary cases a mild salivation for ten or twelve days. —

What are generally termed the symptoms of secondary syphilis, are often the effects of mercury, which in excess will produce all the symptoms of syphilis, ulcers of throat, cutaneous affections &c. These require no medicine, but a cordial and nourishing diet, with whatever exhilarates the mind and invigorates the body.

Even in the secondary stage of genuine syphilis,

only a very moderate quantity of mercury is necessary; I prefer the corros. sub. here, & use it as an alterative — If it be found of any service, it is to be continued for weeks or months, but if not, mercurials may be laid aside. In this secondary stage, it is often necessary to unite with the mercury the bark & a nourishing diet. — See Abernethy on Rheumatism. Pearson, Matthias, Allen, & Benj. Bell new York edition with very copious notes & additions.

Frambœsia or Yaws. — Some difference of opinion exists among physicians with respect to mercury in this disease; but the weight of authority seems decidedly in its favour, both as an internal and external remedy. — Hilary advises the use of calomel so as to produce a very profuse salivation for two or three days, & he says this reduces the swellings, & produces a desquamation. But Thomas is averse to the use of mercury in the 1st stage of Yaws, but recommends the diaphoretics, & in the 2d stage mercury as an alterative. — Dr Bancroft recommends a combination of mercurials & Camphor. — I have treated a few cases by a decoct. of Guaiac with corros. sub. — —

Closely resembling this in some of its leading features is Elephantiasis — I never have seen it, but from authors it appears that it is to be treated in the same way as Yaws, viz. stimulating diaphoretics, & small doses of some mercurial. —

Belonging to the same class of diseases, but more closely allied to Syphilis is Sibbens, a disease peculiar to the highlands of Scotland.

It is to be submitted to the same treatment both local and general as the secondary stage of Syphilis, but is usually more manageable than this disease.

Scrophula. As to the history of this disease I must refer you to authors &c. – Mercury is undoubtedly of use in this affection, with bark, free air, exercise &c. – But it is to be used as an alterative & not as a salivant. hence it is given in small doses & continued for weeks or months. – I have found great advantage from combining Cicuta with the Calomel or Corros. Sublimate.

Mercury, since its introduction by Dr Chisholm, has been very much used in Yellow Fever, & we have in its favour the concurrent testimony of almost all the West India practitioners, who trust nearly exclusively to it. When it was introduced here, so great was the enthusiasm, that it was supposed by many, that it was infallible, if it salivated; but it was afterwards abandoned by many and distrusted by all. The Fevers of the W. Indies are biliary diseases, whereas our Y. F. is a pure gastric affection, unattended with disease of the liver; on dissection the stomach exhibits the same appearances of inflam.n as after virulent poisons. The most approved treatment of this Fever appears to consist, in moderate V.S. at commencement, purges of the neutral salts with antimony, copious use of diluents, a sweating kept up for some time, & extensive blistering, particularly on the Epigastrium. But in the ordinary autumnal fevers, especially of the Southern States, which I am convinced are eminently bilious, the mercurial treatment is carried much farther, than we are in the habit of using it here. Whether it be expedient to urge the mercury to salivation, I cannot decide; as a general rule, I should think it not necessary; but in many protracted cases it may be requisite.

In intermitt fevers, mercury is very tremendously recommended, & no one doubts its utility, as preparatory to the bark, but this is the extent of its use in recent cases. In chronic cases, kept up by visceral obstruction, or by long continued habit, a salivation is imperiously demanded, & succeeds better than any other treatment.

– No disease requires more copious V.S. than acute hepatitis; I have seen it necessary to take from ℥xvj to ℥xx. twice or even three times in 24 hours, & this for several days in succession. (Dr Chapman)

Of late years, mercury has been extolled by some in Typhus; (not the dis. which has prevailed here, but the graver & milder of authors) - I have mentioned above the plan of treatment adopted by Dr Hamilton by mercurial purges; Dissections show that the intestines are loaded with a black viscid mucus, & this may be brought away by mercurial purges, with an immediate abatement of all the symptoms.

There is also another indication for which mercury may be used in Typhus; in the declining stage of the disease, when but little fever exists, great debility, with a black tongue, Coma &c a few grains of mercury every two hours may be given, not to purge, but to stimulate the arterial system, & bring on a mercurial fever, which I have often seen eminently beneficial. A combination of Calomel, opium & vol. alkali is an invaluable medicine in these cases.

In all the Phlegmasiæ mercury has been recommended, but more particularly in the affections of the glandular system, - liver &c. In the acute attacks of Hepatitis mercury, except as a purge, is not required, the disease being more advantageously treated by V.S. & other depletions. But in the chronic hepatitis, no other mode of treatment than a thorough mercurial treatment is safely to be trusted. Unless the symptoms are very urgent, it is proper to introduce mercury gradually into the system; & small bleedings, blistering &c are often necessary to subdue the febrile symptoms, which may arise from the mercurial irritation. In Scirrhus, abscesses, tubercular ulcerations

and other affections of the liver, mercury is also used. - These diseases are with great difficulty discriminated, but it is of less consequence, as the treatment is precisely similar in all of them. Tho' they are so similar in symptoms, they differ greatly in their danger, & difficulty of cure.

In Anginose affections. The first application of mercury to medical use in this country, except in Syphilis, was in Cynanche maligna, in which it was used nearly a century ago by Drs of Boston. Mercurial Emetics particularly Turpeth mineral are much recommended. I cannot say much of the mercurial treatment, tho' I should use mercurial purges, but would not induce ptyalism. Merc.l gargles are most proper, & are probably well adapted to the disease, tho' I never used them. Plenck's solution, or sol. of corros. sul. would be the best gargles. In Cynanche Trachealis Calomel is among many, especially the Scotch physicians, the only remedy depended upon. Dr Rush used it here nearly half a century ago, & Dr Hamilton uses it in so intrepid a manner as may be deemed rash - He gives to a child two years old upwards of 100 grains in 24 hours, & speaks highly of this practice. I do not advise this treatment, for I believe my mode equally successful, & less hazardous, & less repugnant to popular prejudices. Whether the disease be spasmodic or not is of little consequence; I always begin by exciting vomiting, & with this view proper Emet. tart. - Some use the antimonial wine or Ipecac, but the susceptibility of the stomach is so diminished, that these are not sufficiently active - If the Emetic

Tartar fail to produce vomiting, I place the patient in the warm bath for ten or XV minutes; If the stomach still remains quiet, I bleed copiously & repeat the warm bath; the disease must be very obstinate, if this does not succeed, but if the stomach yet resist, I bleed ad deliquium animi, which I have never known fail to produce vomiting. I then give a full dose of Calomel to purge actively, & this generally carries off the remaining symptoms. But if hoarseness, tightness of the chest, & difficulty of respiration remain, I use the Direct Bly. Sensys. The use of sinapisms early will often obviate the necessity of bleeding & ought never to be neglected. Blisters, cupping, leaches &c.

After the disease has continued for 3 or 4 days, the inflamn. usually spreads to the lungs, & it becomes a pneumonic disease, demanding the same remedies as other pneumonic inflamns.

In all the stages and forms of Pneumonia mercury has been recommended by some. It was introduced by the New England physicians, & the only European, who recommends it, is Dr Hamilton of Lyme Regis — I should first deplete largely, & when action is reduced, mercury is a very important remedy. In the second stage of Peripneumony, Calomel with opium & Squill, or Ipecac, forms an excellent expectorant &c.

In Phthysis Pulmonalis it was used as long ago as the beginning of 18th Century, by Dr Radcliffe in the case of William, King of England. Dr Rush has revived the practice in this country, & I have no doubt it has been sometimes successful; indeed I was a witness to two or 3 of the cases related by Dr Rush, but it is doubtful whether these were true tubercular cases. I have never had the good fortune to cure a single case

of genuine Phthysis, tho' I have used mercury freely in more than 100 cases. Indeed I believe Dr Rush lost most of his confidence in it before his death.

But in some pulmonary difficulties from Syphilis, or affections of the liver, as in drunkards, the mercury properly exhibited, will do more than any other medicine. — In incipient stages of Phthysis from impure Pneumonia, before ulceration has taken place, a moderate ptyalism invariably arrests the progress of the disease. — But in Genuine Phthysis from tubercles, or when extensive ulceration exists in the lungs, mercury is not only impotent, but eminently injurious.

Mercury is equally suited to the diseases of the other viscera, the Spleen, kidneys, pancreas &c. This last is so analogous to the salivary glands, that it has been supposed, & I believe correctly, that mercury has some peculiar relation to it. In Rheumatism, we have already said, the efficacy of the diaphoretics was much increased by the addition of Calomel, & I believe the combination of Calomel, Ipecac & opium to be superior to any other. Some have recommended the decoct. guaiac to accompany the mercury. Doubts have been entertained, whether it was expedient to produce ptyalism in Rheumatism. Dr Clarke recommends treating it by the blue pill & mercurial frictions, but avoiding the least salivation; I have however often urged the mercury to salivation with decided good effect. Some cases indeed will not yield to any thing, untill the mouth is affected by mercury. — Others recover during the use of the remedy, but relapse as soon as the ptyalism ceases; here a repetition of the merc. course is not proper.

In Syphilitic Rheumatism; no one will doubt the propriety of a salivation, when any remnant of the venereal disease exists; but this is a rare occurrence, the most of the cases called Syph. Rh. being purely a mercurial affection produced by an abuse of the remedy, & are better managed by cordial diet, tonics and particularly Sarsa, than by any other mode. I do not wish to convey the idea that mercury is never necessary in Rh.m following Syphilis, but only to caution you against a promiscuous use of it; If the above mode do not succeed, a mercurial course may be tried.

In several diseases of the eye mercury has been used with advantage. In Amaurosis, exhibited for a long time as an alterative, & finally to induce salivation, it has been said to cure the disease. But amaurosis depends on so various causes, that our practice is necessarily empirical. Certainly however mercury is very worthy of our attention, as it sometimes succeeds. But it is more particularly successfull in some forms of opthalmia especially the Syphilitic — Also in a protracted kind of opthalmia, attended with constant pain &c, & resisting all the usual remedies, a slight salivation often succeeds in effecting a cure.

Of late mercury has been introduced in the treatment of Mania, & is more used in this country, than in Europe. We have not yet been able to determine the cases to which it is best suited. It has been resorted to in the furious mania, & in melancholia, and perhaps, with equal success. The only caution is to precede its use, by bringing down the action of the system to a proper point — It is now usual to use it in all desperate cases, & its occasional success certainly justifies the practice. —

In most of the intestinal affections, mercury is used with advantage; As a purge in constipation we need say nothing of it here. — In Colica pictonum Dr. Clarke gives Calomel gr X or XV or XX at a dose, & avers, that it rarely fails to open the bowels. Dr Clutterbuck proposes small & repeated doses with a view to salivation. Both modes are proper, but adapted to very different stages. As yet I have never had occasion to resort to the use of mercurials in Colica Pictonum. —

In Dysentery I have already mentioned the use of calomel & Rhubarb in the early stages — Dr Clephorn was in the habit of giving Calomel ℊ ss vj or viij with Opium grj to purge, & declares that this practice was most successfull. When great irritation exists, no doubt of the utility of this Combination. I mentioned above the beneficial effects of gr x or xv. Calomel with Opium grjo. in divided doses, in Cases of spasms &c of bowels, where great irritability of the Stomach existed. But Dr Clephorn afterwards found the superior efficacy of a salivation in many cases: & his practice was successfully imitated by many practitioners of the East & West Indies. Having detailed above my practice in Dysentery, I will only remark that Calomel Opium & Ipecac form my favourite diaphs, & that in protracted Cases, a salivation is sometimes the only mode of cure. But in the recent Cases, I should not resort to so unpleasant a remedy.

In the Neuroses Mercury has been celebrated by some — In Epilepsy I never saw it of any use, the' cures are related. this disease sometimes depends on an effusion of water in the brain, & if ever mercury can be useful, it must be in these Cases.

In Dyspepsia and Hypochondriasis, which are usually Combined, mercury is much praised, & I can readily conceive its utility. For these diseases generally have their origin in obstruction of some of the viscera, particularly the liver, & here no doubt mercury would be very serviceable. But other cases depend on a vitiation of the secretion of the Stomach, & the best mode of re-establishing the functions

of this organ is by small doses of some mercurial, to act as an alterative.

In Tetanus mercurial purges are very useful, but in traumatic tetanus, mercury, I believe, is of no great service. I suspect however that it may be efficacious as a preventive; the wound is dressed with mercurial ointment, & the pills given to excite ptyalism; this is said by the Botanic physicians to be successfull as a prophylactic.

In Hydrophobia, much as it has been extolled, mercury is of no service either as a preventive or cure. Indeed the only preventive is excision of the wounded part. Believing as I do that the virus is never absorbed, but that the disease depends on a tribe of associated motions, beginning at the wound, I am persuaded that excision at any time before the appearance of the disease will be as successfull as if performed immediately after the infliction of the wound. Nor am I certain that it would not be equally so, if performed as soon as the 1st symptom appears, which is a darting lancinating pain in the wound. Thus the vaccine disease is prevented by the destruction of the pustule even 7 days after vaccination. Tetanus also is sometimes cured by the removal of the wounded part; & Syphilis is prevented by a timely cure of the Chancre. —

In difficult deglutition from Spasm, in Chorea, & other nervous affections, m. has been recommended but I do not know it to be deserving of notice. —

In the Cutaneous affections the use of mercury is too well known to need exposition. In Leprosy however its efficacy is doubtful, & by some it is said to be injurious. Others of equal respectability maintain the opposite opinion. I have seen only two or three cases of lepra,

and then remitted everything. Notwithstanding this, I trust to mercurials as promising most, but probably a very long continued course would be requisite.

In Cancer mercurials have been much employed, but I fear with no advantage. Cures are indeed recorded, but they rest on very dubious authority; in fact no remedy is known, except excision of the diseased part. But there are some affections which resemble cancer, & which yield to mercury, as Schirrous ulcerations, & all obstinate ulcers; an ulceration of the tongue very similar to cancer was cured by ℥j Cicuta & ℈j gr. Corros. Sub. every day, after it had been abandoned by Drs. &c.

℞. Dropsies. I have already mentioned its use in hydrothorax &c when combined with Squill &c. & Hydrocephalous accounts are very contradictory respecting the powers of mercury. The proximate cause or rather the disease itself is an increased action of the vessels of the brain, & the proximate effect an effusion of water into the ventricles. Now the inflam. is curable, but when water is once effused to any amount, I fear mercury & every other remedy will fail. It may be observed that about the 7th to 8th day, the violent symptoms subside, but this is only a treacherous calm, depending on the effusion by which the vessels are relieved. The water accumulating again produces the symptoms of compression &c. — From this statement the contradictory accounts of authors may be explained. Dr Rush says it is very curable, & Dr. Monro says it is incurable; Dr R. means the inflammatory stage, & Dr M. after effusion has taken place. Absorbents have not been discovered in the brain, & their existence is doubted by some, the phenomena however of growth demonstrate their existence, & our ignorance of them depends on the defect of our anatomical knowledge. They act however very feebly in hydrocephalic effusion.

After effusion has taken place, mercury is the only remedy worth notice: to be effectual it must be boldly applied not only internally, as largely as the bowels will admit (as they are very torpid) but also by frictions, socks, sheets &c. The only cases of effusion I can suppose I ever cured, were under this mode of treatment.

Lecture 44th February 13th 1815.

It would be easy for me to dilate on the application of mercury to the cure of diseases; indeed scarce a disease exists in which mercury has not been used; a physician of eminence in this city used to direct a mercurial course, whenever other forms of practice failed, & in this way acquired an immense celebrity for his extraordinary cures. But I have mentioned the principal diseases in which mercury is peculiarly successful, & have pointed out directions for exhibiting it. But by improper use of the medicine, several diseases are produced, some of which I have mentioned above. Besides those resembling 2ary Syphilis, there are two other affections, particularly described by Mr. Pearson. 1. Erythismus, (see Mr. Pearson's work), in which he recommends the vol. alk, Camphorated mixture, Sarsaparilla &c. Cases of this kind have never come under my notice, but numerous instances have lately appeared in the British Journals — The 2. is the Eczema mercuriale a vesicular disease. (See Pearson) — In this he advises cooling antimonials, saline draughts, opium to relieve irritation, & a course of Sarsaparilla & mezereon with bark &c. — cool air — Oat flour to the surface &c. — This is the Hydrargyria of Mr. Alley, who describes 3 varieties, the H. mitis, H. simplex & H. maligna.

To the above I may add the alarming symptoms brought on by a profuse salivation, violent inflam.n & even gangrene of the cheek &c. A cure for this inordinate mercurial action has long been a desideratum, & a variety of means have been adopted — Purging has been advised, but from my own experience I should think this useless, & even very injurious, as I have seen it excite the mercurial action, lying dormant in the system.

a case occurred in the Almshouse, which exem-
-plifies this. A dropsical patient had been sali-
-vated 9 months before for syphilis; he was now put
on a course of purges, & after 6 or 8 days, the mer-
-curial action, for 9 months dormant, was developed
& a profuse salivation came on, with sloughing
of the cheek. Another case occurred in a pa-
-tient whom I had attempted in vain to sali-
-vate, but in the cunning manner, I purged
him actively in a fever, & a free salivation now
came on, tho' he had not taken any mercury
since his previous illness.
Sulphur has been recommended, but I have
never seen any use from it. Indeed the only
general remedy is opium, which relieves ir-
-ritation &c. With it some local applications
are to be used. & of these Blisters are far the
most efficacious, but these are too severe to
be used except in bad cases; gargles of Peru-
bark, borax, lime water or the mineral acids.
a strong decoction of green tea with sugar
is a very good one, but the best is a solution
of acetate of lead; this however is objectionable
on account of its effect on the teeth, rendering
them black. Wm. Pearson recommends in
the highest terms free exposure to cool air.
this practice has not been imitated, as far
as I know, in this city, but from the high
authority of Mr. P. I should certainly resort to it.
This closes my remarks on mercury, & I
now proceed to another apartment of medi-
-cines, the Tonics. —

—(Cinchona Lancifolia is the Cinchona officinalis of Linnæus. the cordifolia is the yellow, & the oblongifo. the red. Dr Barton's lectures.)

Tonics, in the most extensive application of the term, form a very comprehensive assortment; but we apply the name in a more limited view, including only those remedies, which are used to correct debility.

As to their modes operandi much difference of opinion exists among authors &c. . . . . .

They differ from the medicines lately spoken of in being much more permanent in their effects; those substances which quickly produce their stimulant effect are succeeded by a correspondent depression, but then are slow in their effects, & are not followed by this depression.

There are three sections of the tonics, the bitters, aromatics & astringents.

The effects of tonics on the system are to augment the force of the circulation, increase the deficient secretions & restrain them when too profuse, to give strength to the muscular fibre, & renovate the powers of the system.

Nature has been lavish with the articles of this class, affording them in abundance both in the vegetable & mineral kingdoms; I shall treat of them as they belong to either of these, & shall begin with the vegt. of which 1st. Peruvian bark, or the bark of the Cinchona officinalis, which is a native of Peru. More than a century elapsed after the discovery of this plant, before its medicinal powers were known, & then they were discovered by mere chance. — So lately as the time of Linnæus only two species of cinchona were known, since which 12 others have been added; three of them only are applied to medicine; viz. — 1: Cinchona Lancifolia or pale bark; 2: C. cordifolia or red bk. & 3: C. oblongifolia or yellow bark. —

The process of procuring the bark is merely to strip & dry it by exposure to the sun. —

—(after using all of these, I am convinced that the pale or lancif. is the best; it is least apt to produce those anomalous diseases attributed to bark, least purgative & least liable to produce hemiplegia, stupor &c. Next, I think, is the yellow bark, when pure, but it is now impossible to procure it unadulterated in this city. The Red, oblongif., the Dr Saunders has eulogized, is, in my opinion, most apt to produce bad effects.—)

Dr Barton - See notes on his lectures. Vol 3.. Art. Intermit.

The yellow bark is brought to us in flat pieces, not contorted, in odour resembling the others, but is very smooth, & infinitely more bitter.

As a medicine, the comparative efficacy of these species is not easily determined, owing to the adulteration generally practised. When first introduced, the Red was preferred, but was soon so much adulterated, that the pale was generally used. - Both have lately been in some measure superceded by the yellow, in favour of which ample experiments in Europ. hosp. give a decided preference. Some have said it was more unpleasant to the stomach, more apt to purge or vomit &c. - but I believe these objections are ill founded, & that it is indisputably the best.

The operation of bark is very slow, & almost imperceptible, producing no sensible alteration in the pulse. —

We now proceed to the application of ~~the bark~~ the cure of diseases. I have already mentioned that it was originally introduced as a remedy for intermittents, & in these amidst the vicissitudes of theories it still maintains its unrivalled reputation. There is now but little diversity of sentiment with regard to the rules for its exhibition, tho' formerly much difference existed. – Thus nothing was more common than the opinion, that the bark should not be given till some time after the attack of the fever. thus Boerhaave's rule was "cum morbus jam aliquo tempore duravit", & Van Swieten his commentator inculcates the same, & both followed Sydenham's opinion. – Directly the reverse is now admitted to be the proper practice, & the earlier we begin with the bark, the more speedy & certain will be the cure – The only objection to the immediate use of it is the condition of the alimentary canal, & perhaps sometimes that of the sanguif. system. Some indeed deny the necessity of preparing the system for the reception of the bark; but it is generally allowed hazardous to commence without any previous evacuation, either by puking or purging; & hence either Emet. Tart. or Calomel is prescribed. Emetics have here in a great measure given way to mere cathcs., but in some intractable cases, emetics are indispensable; they not only empty the stomach, but make an impression on this organ, which disperses those habits of morbid & perverted association, on which in truth, and all periodical diseases seem to depend. Of their efficacy I have seen in my own practice the most decided evidence; but besides these,

– Cullen's Mat. Med. (DTB's edition) Vol. 2. Page 688 & 9.

V.S. is often requisite. For intermittents very generally commence with inflammatory action, & unless this were reduced, the bark would probably not be retained, or would only increase the violence of the inflam.ry symptoms. My rule therefore is not to administer the bark, before procuring the proper evacuations, & by following this plan, I am confident, the bark would be again entitled to be considered, as it formerly was, almost a specific.

Intermittents are not unfrequently combined with visceral obstructions, in which cases the bark has been deemed inadmissible. "That there "may be cases of this kind," says Cullen, "to forbid the "exhibition of the bark, I have not sufficient expe-"rience to determine; but I am well persuaded that "it would be very dangerous to admit of any general "rule on this subject. I am convinced that it is "in the cold stage of fevers, that accumulations of "blood are formed in the liver & spleen; that such "accumulations are increased by every repetition "of a cold stage; & consequently I am of opinion, that "even considerable obstructions of the viscera, if "without inflammation, ought not to prevent "the exhibition of the bark in such quantity, as "may prevent the return of paroxysms." Again, "In such cases I have freely employed the bark, & "never found it increase the affection of the liver, "or spleen; & in other such cases I have constantly "found that the avoiding of the bark, & admitting "therefore the repetition of the paroxysms, brought "on disorders, which frequently proved fatal."

In cases where no inflam.n existed, there can be no hesitation; but when pain, fullness of the pulse be attend, bark might be mischievous; we then resort to V.S. blisters, & a slight salivation, which most commonly cures both the visce-ral disease & the intermittent fever.

At one time it was doubted whether it was best to give it soon before the paroxysm; Dr Cullen declares in favour of the practice; but I can-not

not but think he is wrong; for when given at the
commencement of the accession, it must aggravate the symp-
toms. — Some indeed, as Dr Clarke, contend that no
remission ought to be made in the exhibition of the
bark, but that it is to be used during the paroxysm.
But it is now a rule well established here, that the
bark must be laid aside, as soon as the slightest
exacerbation comes on. —

The ordinary mode of giving the bark is in powder,
mixed in wine, spirit, or what I prefer in milk ℥i or ℥ij, repeated as often as the stomach will
bear, so that ℥i may be taken during the intermn.
In some of the West India islands it is recommen-
ded to take ℥i at once in the morning, & abstain
from during the remainder of the day. This has
been imitated in this city by Mr Dallas, with
complete success in his own person. — Yet I doubt
whether the practice could be generally adopted,
as the stomach would not usually retain so much.
In some, so great is the irritability of the sto-
mach, that they cannot retain the smallest
dose of the powder; & we are obliged to resort to the
infusion or decoction, to which we add some
aromatics, & particularly the Aristolochia Serpent.
This combination will often succeed, when bark
alone has failed, & is peculiarly adapted to chil-
dren, & delicate females —

In Remittent Fever bark has been
used with great success; this might indeed have
been anticipated; as it appears to be the same dis.
with intmtt, under a different form, arising from
the same causes, & often interchanging with them.
Yet it was once forbidden in these diseases, & the
credit of overthrowing the prejudices against it is
due to Morton. — However successful it may
be in Europe, the practice must be received here
with some limitations; for our Remtt are
generally bilious diseases & most successfully
treated by V.S., purges &c. — Yet cases do occur,
where there is less inflamn. & the remissions are
longer & more distinct, & in these the bark with

– See Cullen's Materia Med. Vol 2d. pp. 71. –

Bark is used in several forms of continued fever; Dr Cullen says that, when they arise from the marsh effluvia, which produce intermitts, they may be treated by bark. But this advice applies to this country would be eminently injurious; for this is exactly the case with our continued bilious fevers, which are inflammatory & will not admit the use of bark. Indeed the only form of continued fever here to which the remedy is well adapted is the Typhus gravior or mitior. This is generally supposed to arise from human effluvia but it certainly sometimes arises from marsh miasma, as do intermitts. At the commencement it is marked by a phlogistic diathesis & bark is inadmissible; but there is a period when bark is to be introduced; this is neither at commencement, nor at the declining stage. As long as the pulse is excited, skin hot, eye wild, mind phrenitic bark is to be refrained from; and not less so, when subsultus tendinum, nervous tremors & low delirium have come on. The 1st set of symptoms is to be treated by purging &c. and the second by vol. alk. wine, blisters &c. But between them a stage exists, when the disease seems inclined to remit, & bark comes in with great benefit.

In our own late epidemic, the Typhus pneumonia, it was much used, but I never found any cases in which I thought it proper, except in the state of convalescence, when it was very useful.

All agree that Bark is inadmissible in Synocha, but a very different opinion is held by some in the Phlegmasia, as in Rheum. As this is an inflammatory disease, I cannot think bark adapted to it; yet Dr Hayes arth says bark in Rheumatism is inferior only to mercury in Syphilis. He prescribes V.S. as tending to induce a chronic state; & after antimonials, & opening the bowels, he gives the

bark in small and repeated doses. Samuels and others advocate the use of bark, but none so far as I know. — The I condemn this practice, yet in some cases, after the inflam^n is somewhat abated, and the disease assumes a periodical form, bark is admissible & often very useful. Rheumatism arising in marshy grounds often assumes a Remittent form, & even an Intermitt, the patient being generally low & emaciated; & here the cure depends on bark. — In Hemicrania, a periodical headache, I have used the bark with great success, preceding it by an emetic; in this way I have cured the dis. when V.S., cupping & blisters had failed. —

In Gout the bark was a favourite remedy of Sydenham & also of the elder Gregory; another Physician of eminence states it "a divine remedy." Probably it is only adapted to those cases which are attended with great weakness, particularly of the stomach. — Gout however sometimes is excited by exposure to marsh effluvia & is only curable by purging & bark. Mr Frances of this city is under the necessity of visiting every year a marshy place, & he never returns without an attack of gout, assuming the intermitt form; & is never cured without bark. —

In several intestinal affections, particularly Dysentery, bark has been highly commended. — Dysentery however is a genuine inflam^n, & of course in the 1st stage bark is inadmissible; indeed I cannot conceive a case of genuine unmixed Dysentery, in which bark would be useful. But when it assumes the intermitt form, bark with opium during the intermissions is the best mode of treatment.

In some of the active affections of the lungs, our medicine has been used; In true Pneumonia its use is certainly prejudicial; tho' Senac advises it — In what is provincially termed "pleurisy in the head", which assumes the same form as common pleurisy, except the head being more violently affected, the best plan of treatment is blistering the neck and the use of bark; the pulse is active & full but soft, & would appear to indicate V.S., but this is never practiced without injury.

In some Catarrhs, particularly the Catarrhe tertiana, the proper treatment is bleeding and purging, and then exhibiting the bark.

In the influenza of intrmtt countries the cure is not to be effected without bark; but in this country it is usually an inflammatory disease, & V.S. is necessary.

← Cullen's M. M. v. 2d. p. 76.

Lecture 46th. February 16th. 1815.

We proceed to speak of application of bark to some of the exanthemata. It was at one time used in Smallpox, in consequence of an opinion that it favoured suppuration & filled the pustules, but it is now abandoned in common cases; yet cases may occur where from the great debility of the system, the pustules do not fill, and bark will be very useful; also in the secondary fever of Smallpox.

The measles, as they appear here, are generally very inflammatory & demand free V.S. &c. But in the subsequent stage, an indistinct and obscure fever, assuming in some degree the mitt or Remitt type, arises about X or XII days after the attack, & requires the use of the bark with Serpentaria.

Erysipelas almost always assumes an inflammatory diathesis, & is only managed by V.S. blisters, & purging; but the case is very different in some other Countries. A remarkable difference exists between the Scotch and English physicians in this respect; in Scotland it is inflam^d, whereas in England bark is strongly recommended; Sir George Fordyce prescribes ℞. q. h.

Erysipelas is here sometimes an attendant on intemperate habits, & the tonic & stimulant plan is alone calculated to afford relief.

Of the use of bark in Scarlatina, I have little to say, not having used it at all. Dr Cullen says that some cases of S. anginosa are the same as the Cyn. maligna, & bark is the remedy to be depended on; but he contends that there is a Sc. anginosa, in which the bark is injurious. In this country the inflam^d type

In hemorrhagy I am inclined to think that the bark has been too indiscriminately used; in the active, it is undoubtedly improper, though it has been prescribed, & I think mischievously. Yet there are some hemorrhagies which require bark, as those of low fever, of scurvy &c. also Menorrhagia depending on laxity of the uterine fibre – ℞. Cinchon. ℥ij.. Aq. calcis ℥ij. digest for 3 or 4 days & strain – Vinegar of Squill ♦ d.

Of the Neuroses there is scarcely one, in which it is not habitually employed, but is chiefly praised in Epilepsy. This depends on such a variety of causes, & assumes such diversity of character, that no one mode of treatment can be laid down as a general one. We usually however begin by depletion, & then follow up by tonics, of which bark is the chief. this is often combined with the mineral tonics, cuprum ammoniacum, iron, white vitriol &c. –

Dr. Cullen does not think highly of it in Epilepsy, but considers it superior to all the other tonics in Chorea St. Viti. Whatever its powers may be, there can be scarcely a case, in which it ought not to be preceded by purging. – Sydenham treated it successfully by bleeding and purging; but after the system is reduced, the cure may be perfected by bark & other tonics. –

Of its use in Tetanus I know nothing. Dr Rush & Dr Horack have succeeded in a few instances, but they used so much wine with it, that it is difficult to impute the whole to the bark.

Pertussis in its primary stage is an inflamm^y disease, & is to be treated by V.S. mercurial purges, blisters, and antimonials.

— Cullen's Meth. Vol 2. P. 78 —

But when the complaint is advanced, and kept up by the power of habit, bark is very useful, unless some congestion exists in the lungs. Tinct. Cantharidum gt. iv or v. with each dose of bark forms a favourite remedy in London. Dr Lettsom &c.

In Asthma, bark has been too promiscuously used; in no one of its various forms ought it to be given during the paroxysm; but it forms a part of the treatment during the intermissions, to strengthen the system, & secure it against future attacks; particularly if the disease is attended by flatulency & gastric infirmity.

In almost all affections of the stomach, bark has been used, chiefly in infusion; in confirmed dyspepsia carbonate of iron is usually combined with it, & when any acidity, soda.

In Phthysis Pulmonalis. Dr Cullen says that when the exacerbations of the hectic are markedly more or less of a cold stage, & occur regularly & at stated periods (usually quotid; sometimes) the bark will prevent their paroxysms for a time, & thus alleviate all the symptoms; but he never effected a cure, for in spite of the bark, the hectic would at last return, & prove fatal.

But there is a case of pulmonary disease, in which the utility of bark is much less ambiguous; × × × × × × ×, no hectic fever or night sweats attend; in this state, no serious organic lesion of the lungs exist, the pulmonary system merely partaking of the general debility; here bark & other tonics are our best remedies, & are often successfull. These are probably the cases in which Sydenham found horse riding so successfull; but in this form Digitalis & mercury must necessarily be detrimental by increasing debility.

As a remedy for Scrophula, bark is now justly considered as one of the most important articles in its treatment. Scrof. is divided into two stages, the 1st when there are no ulcers or swelling, but only an evidence of the Scrophulous predisposition, & here the bark with iron, nourishing diet, exercise &c will often prevent the development of the disease. Nor is it less useful in the second stage, when the dis. has appeared externally; here I have derived very great benefit from a combination of bark & mercury, but only as an alterative, for a deep mercurial ~~impression~~ is injurious. Even in the last stages, when large abscesses exist, the powers of bark have been much celebrated for supporting the strength of the system. In Rickets, nearly the same mode of treatment is to be followed as in Scrophula.

Bark was at one time used in Cancer, & was praised by Dehaen & Ettenside; but is now not considered as having any power. In cases occurring in a loose & vitiated state of the system, it is used to support strength, and as a wash or poultice to the part.—

In some forms of Dropsy I can conceive bark to be very useful, as when there is great weakness of the digestive organs; but more particularly when it arises in marshy countries & assumes the intermittent guise.—

In Scurvy the organs of digestion are much debilitated, and of course bark has been recommended. Lind, Sir Francis Milman &c. In that form, which attacks the gums, bark is by all allowed to be of use as a dentifrice, lotion & internally with myrrh.—

Bark is used in several of the locales; in Leucorrhœa, very improperly placed in this class, it is often very useful. This disease has been supposed to be seated in the vagina, & from this pathological error arises our want of success in its management. I am convinced that it is a disease of the uterus, being a vitiated discharge from this organ; I was led to this opinion by the fact that the menses are always interrupted in fluor albus, & by dilatation, the uterus being found pale and flabby. I therefore uniformly direct my remedies to the uterus thro' the medium of the general system. Infus. of bark with lime water, & attends the Polyg. seney. as Emmenagogue.

I have used with success the bark & bals. Copaiva in old gleets, & in the gonorrhœa dormientium, a disease depending on debility of the genital system, often induced by unnatural indulgence. ℞. Cinchon. ℥j. Bals Copaiv ℥ij. make into electuary, & take the whole during the day. If it purges, add Laudanum.

In Gangrene & mortification no remedy has acquired so high a reputation as the bark. Much injury however has been done by the indiscriminate use of it. Gangrene is sometimes the effect of violent inflam. & sometimes proceeds from loss of tone. In the former case, tonics, at least in the 1st stage, are improper, & the inflam. must be subdued by V.S. copiously employed. — But when it results from debility or comes on in the low Typhus fever, bark is to be perseveringly employed, & its powers are much increased by Camphor, vol. alk., musk, serpentaria, wine, wine whey & other stimulating drinks.

The use of blisters in arresting the progress

of gangrene has much lessened the employ=
ment of bark. But however efficacious the
blisters may be, the rejection of bark is impro=
=per. When it proceeds from wounds, the bark
may indeed not be necessary, but in most
other cases it is requisite to support the strength
of the system.

The unbounded confidence in blisters has
lead to their too indiscriminate employment
in gangrene; for in some cases they are not
only useless, but injurious. Thus when there
is great degree of debility in the capillary
action of the part, they increase the evil; as
in some dropsies, sphacelus, &c. in which they
will sometimes produce mortification, &
extend it, if it already exist. The same occurs
in many cases of Erysipelas. — In fact
they never can be useful, unless there is
sufficient power in the system, or accom=
=panied by those remedies which support
the action of the part, as bark &c. —

—[The bark is first to be well incorporated with a teaspfll of milk in a cup, & then more milk added; in this way the bark will be well mixed, which cannot be done if it is rubbed at once in large quantity of milk. This mixture must be made only at the moment, when it is to be taken, otherwise the milk acquires the bitterness of the bark, & becomes a nauseous dose; whereas at first it is quite tasteless, the bitterness being covered by the milk.

It is often very difficult to persuade infants to take it; they spit it out as soon as it is put in their mouth; or on a spoon

While I was a student, I knew two infants to die of intermitts from this cause, merely because the phys. did not know how to force the bark down. A 3 child was sick in the same family, & I placed it on the lap of its nurse, put an empty spoon in its mouth, & then with one hand closing the nostrils, with the other I poured down the bark in milk; so that the patient, not breathing thro' the nose, was obliged to swallow, or suffocate. Dose for infant 3 months old, gr. x or xv. — But I prefer the sulphur in such children; indeed I have never been more satisfied with any medicine, than with sulphur in the periodical fevers of children; these are not always attended with the usual circumstances of true intermitts, having no distinct chill, but merely a paroxysm offever coming on every evening. I prescribe sulphur gr. xv or xx. every hour during the morning till it purges gently, & half an hour before the accession of the fever, Laud. gt. ij. — This mode is uniformly successfull. — (Dr. Physick.)]

℞ Cinchon. ℥j
aq font. ~~℔ss~~.
Coque ad ℔j. & cola.
dein adde
Vinet. columb. ℥j. m.
Fiat Haustus

Lecture 47th February 17th 1815.

Before dismissing the subject of Bark, I will make a few remarks on the modes of exhibiting it. I have already said that the usual mode was in powder, & that the best vehicle was milk. But many stomachs cannot bear it in this form, & it becomes necessary to extract its properties by some agreeable menstruum. It consists of bitter extractive, tannin, gallic acid, mucilage and resin; the two last not soluble in ?) The infusion is made by steeping ℥j bark in ℔j water; dose according to the strength of the stomach; but it is a feeble preparation, & is seldom used except as a bitter. The decoction is much better & is made thus: ℥ij of coarsely powdered bark are put in ℔ij water, in a bottle & corked. This is then placed in water, which is boiled for an hour; If boiled in an open vessel, the extractive principle unites with oxygen & precipitates, & much of the virtue is thus lost.

The tinctures are so little used, that we need not notice them here. By a tedious pharmaceutical process, an extract of bark is obtained, but it is a feeble and precarious preparation: (in pills.)

To assist the bark and to prevent its injurious effects, various articles are combined with it. By the addition of Serpentaria, its powers are increased, when we with a more cordial and stimulating remedy than bark alone; as in low fevers, gangrene &c. — Camphor is united with it for the cure of very obstinate intermittents. Vol. alk, Musk, Camphor, in Sphacelus and gangrene. — Cloves, cayenne pepper, mustard, of either grs x or xii to ℥ij bark, in intermittents. Iron is added in diseases of the digestive organs; Cuprum ammoniacum & other mineral tonics in Epilepsy. Valerian, in many spasmodic diseases. Cicuta is joined with it in Cancer; Ol. Cajeput in Pertussis; Cream of tartar in dropsies; & Carbonate lime or magnesia, soda or potash in acidity of stomach.

~~(said to be a menispermum or moonseed)~~

When the bark vomits, some aromatic is added, & perhaps Serpentaria is the best.— When it purges, opium will prevent it; & if it induces constipation, Rhubarb is to be given with each dose.

Notwithstanding all these additions, some cases will not admit of the use of the bark by the mouth, on account of the great irritability of the stomach, which rejects it immediately; & in these, it has been used as Enema — I have seldom used it thus except in Children; & tho' I may have done good with it, I am not certain that it is capable of curing any obstinate disease. it is also very uncertain how long it will be retained. — the Enema is made with g. arab. or Starch & a little laud. added to the bark, of which ʒij or ʒiij.—

Cataplasms over the stomach are sometimes used, & should be made with brandy.—

Baths of the decoct. of bark, or of the oak bark are often very useful. — I have used it to check vomiting in Cholera morbus, in Yellow fever, & Cholera infantum; & to its success in one instance I owe my success in life; a case of abscess in liver, the patient had sunk under it, & was abandoned by her physician; her extremities were cold, senses gone &c. a few minutes after being placed in the bath of oak bark, her senses returned, & she became convalescent.—

Bark is applied to the surface in a dry state; Dr Darwin says that if strewed in the bed of the patient, it will cure intermittents, but to believe this implicitly requires faith; I have seen it used quilted in jackets with considerable benefit in delicate females & infants; but must be taken off during the hot stage, as it aggravates it. — In great majority of cases it fails, & is at all events a miserable substitute for the internal exhibition of the medicine — It acts merely by sympathy &c.

As nearly allied to bark in many of its properties, I am next to speak of the Serpentaria Virg.: or Aristolochia Serpentaria; a perennial plant, native of our own country; the root only is used, and is aromatic & bitter. It is an astringent, tonic, diaph.: & sometimes diuretic. It was early used in the cure of intermitts, but it is not clear that it is capable alone of curing them. Sydenham used it with wine in intermitts, & recommended it to be added to the bark, whenever it is proper to give wine, & the correctness of this practice has been confirmed by subsequent experience. It not only adds to the power of bark, but also enables the stomach to retain it. — In Remittents it is often decidedly superior to the bark, as it suits the stomach much better. — An excellent formula in intermitts, & much used in this city, is the following: ℞. Pulv. bark ℥ss. Powd. Serpent. ℥j. Carbonate Soda ℥ss. M. divide into 4 powders, one to be taken 4 times a day. — Why this should have any peculiar powers, it is not easy to explain; but the fact is not less certain.

Serpentaria is a popular remedy in the secondary stages of pleurisy & other pneumonic affections; in Catarrhs, Rheumatism &c it is used as a diaphoretic, after one or two V.S. — Also in dropsies, in which I should suppose it might often be useful, particularly if they assumed any thing of the intermitt form. In the bilious pleurisy, there is much gastric distress, & vomiting of bile & the system will not bear depletion but somet. sinks under 2 bleedings; the best practice is, after a moderate V.S. if necessary, to give the infusion of Serpentaria to induce diaphoresis. This is a Southern disease, & mercurial purges are much more necessary among the Southerners, than with us. —

I have only one more remark to make with regard to Serpentaria; that it is admirably

–(Said to be a menispermum or moonseed.)

suited to tranquillize the stomach, particularly in bilious vomiting.. Decoct. Serpent. ℥ss. Prescribe. Dr Rush owed his life to this medicine, after an attack of bilious fever, when nothing else would allay his vomiting.

The Angustura, a kindred article, is a late and I suspect a very valuable acquisition. It is the bark of a tree, native of S. America, to which Baron Humboldt gave the name of Cortaria febrifuga. it is brought to us in small pieces, bitter to the taste, & slightly aromatic. It at first promised to supersede the bark; but experience soon corrected this mistake, & Physicians, running to the other extreme, abandoned its use entirely. But of late some of the English Physicians, partic.y Mr Brandt, have recalled our attention to it. They extol it, as superior to bark, in Typhus, as it does not offend the stomach. I have as yet only used in Chronic diarrhoea... It is exhibited in Infusion, decoct. or powder, which last is the best mode. Dose ℈j to ℈ij. —

Of the plant supplying the Columba we know nothing certain; it is brought from Columbo in the island of Ceylon, & is the root probably of an herbaceous plant; it is intensely bitter. It was once used in intermittents & Remitts, but was found so inferior in power to Cinchona, that it was laid aside; & the only form of fever in which it is now used, is the hectic, particularly of Phthysis, & it is certainly given with advantage.
But it is more especially used in complaints of the alimentary Canal; for the W. Indies to check bilious vomiting. In the latter stages of Dysentery, & still more in the cholera infantum to restore tone to the alimentary canal. Dr Cullen speaks well of it in Dyspepsia & I think with reason.
It is by some given in combination with

- [gtt x or xv. are sufficient, if repeated 5 or 6 times a day. - a decoct. of Columb. & orange peel, ℥ij. f.d. a very pleasant tonic. A extract in pills containing each grs ij & 3, 4 or 5 pills a day, is frequently given. - The infus. or decoct. soon spoils if kept, becoming acid. — — Dr Pugnick -]

++ (This is the Frasera officinalis. -)

with steel, but this, I believe, destroys its bitterness, on which its good effects depend. In powder it is usually given in doses of gr. X or XV. but this is quite inert, & the dose should be from ℥ss to ℥ij. — It is given in infusion, but in making a decoction, the power is evaporated. —

A species of Columba is found near Marietta, Ohio & is said to be equal in power, if not superior to the imported. This I doubt, as the specimens I have seen were less bitter & of a lighter colour. —

Among our native articles is the thoroughwort, or Eupatorium perfoliatum, of which we have already spoken among the diaphoretics. Besides its emetic & diaph.c properties, it is also a powerful tonic; but its effects depend on the mode of exhibiting it. It is emetic or diaphoretic, when given in warm infusion; but in cold decoction or in powder, it is tonic. In New York it has been most extensively employed in intermitts, Remitts, Yellow fever, Catarrhs, & many cutaneous affections. It seems peculiarly adapted to intermitts & Remitts, as it may be continued during the hot stage as a diaphoretic.

There is another species of this genus, also endowed with some medical powers; the Eup. purpureum, or wild hoarhound. It is tonic, diaph.c, diuretic, and mildly cathartic; at the same time not offensive to the stomach like the bark. The infusion is made with ℥i of dried leaves to ℔ij water; of which ℥iij or iv. may be taken ⅌ quatriduum. — or it may be given in substance, alone or with bark; I have not been enabled to experiment with it, but it is a popular remedy in Virginia in weak & depraved stomachs, in Catarrhs and obstinate coughs, &c. & is used as a tea —

Of the Centaury we have a species not inferior to the European — the Chironia angularis: (that of the shops is the Centaurium minus) — It is a very pure bitter, slightly aromatic, & not unpleasant to the stomach — It is much used in Intermitts, Remitts, &c. & may be continued in every stage — as much of the infusion or decoction as the stomach will bear.

Cornus Florida & Sericea, each of which is a powerful tonic — the Flor. is too familiar to you to need description; the Sericea is a shrub, called reddogwood, growing exclusively in marshes. — The C. Flor. is nearly allied in its sensible qualities to Cinchona, & it is presumable that it might be often a good substitute.

I have no experience with it, but the concurrent testimony of many respectable physicians leave no doubt of its efficacy. It is administered in all the forms & the same doses as the bark. – Of the C. Serotina I know but little – same doses &c. –

Prunus virginiana, the Cerasus Virginiana of Michaux, & the P. Serotina of Willdenow; the common wild cherry of our country. The bark, & particularly the bark of the root is the part to be used. It is given in Tincture, infusion, decoction or powder, & the doses the same as those of most other similar articles. It has been used in Intermitts and Remitts, & is spoken of in extravagant terms by some practitioners. My experience is confined to its use in pulmonary affections, & I have been much pleased with it in hectic, whether from Phthisis or other causes, or humbar abscess. It often mitigates the cough, restrains the diarrhœa, checks the sweats & invigorates the appetite; still it is a mere palliative. – In Asthma, benefit has resulted from a long perseverance in its use; I have used it in both the pituitous and Spasmodic Asth. & with equal advantage; I have given it as a tonic during the intervals, & have derived as much assistance from it as from any other article. It has been used in Dyspepsia, Chronic diarrhœa, Cholera infantum &c. Tho' I have never used it in these diseases, I am persuaded it would be beneficial in all cases, to which the Tinct one is applicable. See Morris' Inaug. dissert. on Prun. virgin. –

There are many other vegetables, natives of our country, possessed of similar powers; but as they are comparatively but little used, I shall omit them here, & pass on to the mineral tonics.

The preparations of Iron are entitled to the precedence, from their superiority over all other minerals, excepting perhaps mercury. Iron is supposed by some to be inert in its crude state, but this is not correct, for the gastric juice readily acts on it, & when reduced to a state of minute division by filing &c. it is a very valuable medicine.

By the processes of chemistry many preparations of iron are made, but few of them are retained in medicine; indeed the properties of all of them are possessed by three, which alone we shall mention.

1. The Rubigo ferri, rust or Carbonate of iron, is more powerful than the pure metal, & less acrid than most of its salts. dose grs. v. x. - xx. t.d. given in syrup, or in pill & generally combined with some aromatic, as gentian. - The chalybeate wine is made thus: ℞. Carbonate of iron ℥iss. Orange peel and Gentian aa ℥ss. ... these are put in a bottle of port wine, & exposed to the sun or gentle heat for 3 days, & then decanted. dose ℥ss or ℥j wineglassfull - t.d. -

2. Sulphate of iron or green vitriol; dose. its only superiority over the others is that it is given in smaller doses - It is administered in form of pill & generally with myrrh &c. -

3. The Muriate surpasses all other preparations of iron in power - it is generally given in Tincture of which gt. xxx may be taken t.d. but if the stomach is at all irritable, it will excite vomiting - It may be mixed with water, or preferably with Aq. Cinnamomi. -

The Iron has always been a favourite remedy among physicians of every country; it was supposed that, as it constituted a part of the blood, it would be readily admitted into the circulation, & thus produce its effects. But experiments have shown most decidedly that it never can enter even the chyle. -

It is indeed a fact well known, that the blood becomes more florid under the use of Chalybeate medicines; but the same may be said of other tonics. —

In its operation on the System, iron is a powerful and permanent tonic; & the indications, which it is calculated to fulfill are numerous and extensive. When speaking of bark, I mentioned the use of iron with that article in many diseases, particularly the Neuroses, Chronic debility &c. But it is applicable to many other affections; & hemorrhages it has been given, under the idea of its being an astringent, but of this we have no proof, nor is this property necessary to explain the effects of iron; I should use it exactly in the same cases, in which bark has been commended; but it is best suited to menorrhagia, depending on a laxity of the uterine vessels. It may appear paradoxical that our medicine is equally suited to Menorrhagia & to Suppression of the menses; but each, after has its origin in a state of the System, to be treated only by tonics.

In some of the Cachexia our medicine has been much used — In all ulcers of an obstinate and malignant nature. Of late even in Cancer, large & frequent doses, continued for a long time, have been commended; washing the ulcer with the S. muriat. — or covering it with the Carbonate. — Even allowing that it never can cure, it certainly may palliate the symptoms, & undoubtedly it cures some very malignant ulcers, which resist all local treatment. —

Dr. Physick has seen obstinate intermittents, after bark &c
had been used without effect yield almost
instantaneously to Sulph cupr. gr ¼ q.h. – (E.B.)

Lecture 49. February 23d. 1815.

The next metal we are to speak of is the Copper, which differs from other metals in not being insipid & inodorous; for it has an unpleasant taste, & when rubbed, a disagreeable odour. Still in its metallic state it is inert, untill acted on by the fluids in the stomach; as when a cent is swallowed, it produces after a time, very violent effects & among others, a profuse salivation. — It is never used medicinally in its metallic state, but is prepared for use by Chemical processes.

Of the Sulphate of Copper or blue vitriol, we have already treated among Emetics, but this is not its only property; in doses of from grs to grj P.D. it is used in obstinate intermittents, & is particularly extolled by Dr Adair of London & Dr. Monro of Edinby; the latter uses the following ℞. Sulph. Cupri. grs iv. — Extr. Cinchon. ℥ss xxxij. Syrup q.s. f. pill. xvj ejusdem one 4 times a day, for two or 3 weeks. I have never used it, but the authorities in its favour are very respectable. It forms the best injection for gleet, that I have ever used; gr ij to the ℥j, but sometimes must stronger. On the whole however a much better preparation is the Cuprum Ammoniacum or ammoniaret of copper. This is chiefly applicable to some of the Neuroses, Hysteria, Chorea and Epilepsy; of its utility in this last we have indisputable evidence. Dr Cullen says it has performed many cures, & an Italian physician says it hardly ever fails in idiopathic epilepsy, if the action of the system have been previously reduced. This last clause contains an important practical remark; for copper being a stimulant, it should not be given, while there is too much action. — It has been my lot to witness pretty extensively, here & in Europe, the use of this medicine in Epilepsy, & the result of

my experience is, that in some instances, particularly in children, it protracts to a more distant interval the return of the paroxysms; but never in a single case, have I seen it effect a cure. Still it has been too highly recommended to be hastily abandoned. It is best to begin by small doses, & increase gradually as far as the stomach will bear. Dr Cullen advises intermitting, after some time, as he fears an accumulation of it in the system would produce the same mischievous effects as lead; but I think his fear is unfounded, for I have seen it given for months, & Dr Battie of Genoa gave ℥xvij without intermission, & cured the patient, & no bad consequences resulted from the medicine.

It has been used in some of the cachexia, & in dropsies; it is a diuretic & probably may be introduced with benefit in the treatment of dropsies. —

Acetate Copper, Aerugo Aeris or verdigris is now only used externally; as an ointment in tinea capitis, chancres, & phagedenic ulcers, also a wash of gr ij to ℥j water for the same purposes, and a much weaker one as a collyrium.

Zinc in its metallic state possesses no medicinal powers, but many of its compounds are used. —

The Oxyd. or Flores Zinci has been much used in Epilepsy in doses of gr ij t. d. in pill; and I have certainly seen it beneficial. Dr Kuhn cured a very violent case with it, & Dr Barton a case of chorea. —

Sulphas Zinci or white vitriol is by many used in all nervous & spasmodic diseases; & it is not difficult to collect many evidences of its utility. I cannot say it has ever cured Epilepsy or chorea in my hands, because I have never trusted to it alone; but have always commenced by purging &c & after

– (In this formula a decomposition takes place, & the infusion is nothing but a solution of the acetate of zinc.)

which, I have used the following combination,
℞. Sulph. zinc. grs ij — Valerian grs x. Cinchon ℥j.
m. — t. d. increasing the quantity of the vitriol
to grs vj. t. d. —

When an emetic, I mentioned that this article had been highly commended as an antispasmodic in Pertussis; I have tried it, but have not found it at all equal to the asafœtida. — In some forms of Asthma &c. It is used as an injection in gonorrhœa; — grs viij of the S. zinc — Sacch. saturn grs x. gumm. ℥ij Water ℥viij. m. — If great irritability with chordee attend, Laud. ℥j is added. In old cases it is to be made much stronger, or what I prefer with the Corros. sub. grs iij or iv. —

A collyrium is made of wh. vit. in Rose water. —
Of the Acetate of Zinc, I know but little from experience; it is actively emetic, & adapted to all the cases, in which the wh. vitriol is used; Many prefer it to the Sulphate as an injection in Gonorrhœa — ~~grs x to ℥j~~ water —

Tutia, an impure oxyd of Zinc, is found in the mines of Persia — it is used in weak solution as a collyrium, but more frequently in form of unguent for inflamm.n of the tarsi.

Lapis Calaminaris, a carbonate of Zinc; is used as a collyrium, as an escharotic in some specks on the cornea, & in chronic ulcers of weak & relaxed habits. Mixed with armenian bole, p. æ. — in excoriations of children, discharging a thin sanies. —

Bismuth; the only preparation used is the Subnitrate — to Dr Moliere of Genoa we are indebted for this addition to the Mat. med. Dr Marcet of London revived it, & established its reputation. He states that he has made a full trial of it, & is confident of its utility; & since his publication, it has been much used, & all speak well of it, in Gastrodynia, Pyrosis, Cardialgia, & the depra-
ved

depraved state of stomach incident to pregnancy. It has been used in Boston, & with very considerable success in these cases; See Bost. Med & Surg. Journal. As yet it has not been much used in this city; my own expectations have been somewhat disappointed, but this has not destroyed my confidence in it, for no diseases are so difficult to cure, & depend so much on diet &c as these — It is certainly a safe & active medicine; dose gr vj. b. vel t. d. — with gum arabic, sugar &c. —

Silver is distinguished for the difficulty of its oxydisement; but acids, particularly the nitric, act on it. The nitrate is the only preparation used in medicine; it was long ago introduced, but was laid aside on account of its harshness; to D Stevens we owe its reintroduction, & by him it was used with success in Epilepsy; since this Bostock, McGynnis & others boast the same success. It has been used here, but not with much benefit. It is also said to have cured Chorea — One case of angina pectoris is recorded, cured by it, on the authority of Dr Cappe — We may begin with gr fs. b. d. in pill. — Of its external application, I need say nothing, as you are all familiar with it. —

Gold was introduced by Dr. Chrétien of Montpellier, & is used in state of minute division, 2d in state of oxyd, 3d oxyd with ammonia, 4d oxyd with oxyd of tin, & 5d the muriate — They are used only in frictions to the gums, cheeks &c. & among them the muriate is far most powerfull. — The 1st preps is given in doses of gr iij a day — 2d gr fs to gr j. — 3 & 4 still smaller, & the muriate 1/12 to 1/16 gr. a day. —

It appears that these medicines speedily cure Chancres, warts, & syphilitic ulcers.

They are also represented as powerful in diseases of the uterus, schirrus, & other glandular affections. In New York the med. has been tried extensively & with complete confirmation of Dr. Christison's asserions in its favour. If these be really correct, it is a very valuable acquisition; for the cure is effected without salivation, & the exhibition of the medicine is not prevented by any circumstances or states of the system. —

Lecture 50th February 24th 1815.

Tinea pondorosa or Parytis; the muriat only is used, & is particularly adapted to glandular and lymphatic diseases. Dr Crawford eulogizes it in Scrofula & Cancer; & Dr Clarke asserts, that cases of Scrofula in the W. Indies, which resisted bark &c, had often yielded to this medicine. Mr Pierson also speaks highly of it in Scrofula, and obstinate syphilitic ulcers. The dose of the Tincture is gt. xl. t. d, increased to gt. lx or lx. t. d

Of Caly or lime we have already spoken under the head of Antilithics. Exhibited in new milk, it is given to check vomiting, as a tonic, & as an antacid, in Dyspepsia &c. It is used as a astringent in the advanced stages of dysentery and Diarrhoea. Externally, it is used for old ulcers, & with sweet oil for burns. — The Tincture of the Muriate of lime has been lately celebrated in Scrofula, & is given in doses of ℥ss to ℥i. —

The Mineral acids; the Nitric is the most active & useful. It was at one time considered as a cure for syphilis, but the result of experience is, that it is not adapted to the 1st stages, but is well suited to the secondary ones & also to the Mercurial diseases. It is much used in Hepatitis, in Dyspepsia with liver complaints, and in Cutaneous affections. ℥ij in ℥ij of water are to be taken daily — It is also used as expectorant with Lac-ammoniac.

The Sulphuric acid is given chiefly in form of Elixir vitriol, gt. xv. xx. — It is a mild tonic & is used to create an appetite. It was formerly used in the Menorrhagia; & now in some hæmorrhages; in menorrhagia I think it might be useful; in Epistaxis it was Sydenham's favourite. The Acid has of late been much used in the cutaneous eruptions; & it certainly cures Psora & probably many others. It may be used externally for the same purposes; ℥i. to ℥i lard forms an ointment for Tinea capitis &c; but a much

Fowler's min. Sol.n — ℞. Arsenic
Carbon. potass. ac gr. 64.
Spt. Lavend. comp. ℥ss. —

Boil the arsenic & potash in ℔ss. of distilled water (in a sandbath) till dissolved. Strain. & when cold add the Lavender & water enough to make ℔j of the whole —

water mode is in solution, ℥i of the acid to ℥viij water, which is equal in efficacy to the mur. sulphuris, & is free from the disagreeable smell.

℞ Muriatic acid has been used in all the cases where nitric is recom., & with similar effects. The dose & manner of exhibiting it, the same.

Arsenic in its metallic state is inert; but at a high degree of temperature becomes an oxyd, or as it is now said, an acid. This is the preparation used in medicine, & is prescribed in several forms; the most popular of which is the "Fowler's mineral solution", or a solution of the arseniat of potash; dose gtt x v. v. d. The arseniat of potash is also used in doses of 1/6 to 1/8 gr. And the acid or oxyd in pills is given in the same dose. Darwin preferred a solution (saturated) of this acid, gt. x–xviij. My own conviction is, that there is no great superiority in either, but I generally use the min. sol. alone, & the oxyd, in combination.

It has recently been much employed, but it is in Intermitts, that it is most celebrated. That it is efficacious in these I am not going to deny, but I think its powers are much overrated. In all weak forms of intermitt, approaching to Typhus, or occurring in Cachectic constitutions, it is inefficient & even injurious. Indeed this might be concluded from its effects on the system: for tho' ranked among the tonics, it has no one property of this class; during its exhibition, it produces nausea, lassitude, debility, and afterwards extreme exhaustion, & edematous swelling of the limbs. Thus in the Almshouse, where our patients are all enfeebled, the med. has uniformly failed, & never has cured a single case of intermitt. Even in circumstances propitious to it, it will not cure the disease, if at all obstinate. But it is better suited to children, in whom it generally cures the disease.

It has been disputed whether it ought only to be given during the apyrexy, or to be continued

during the paroxysms I think it may be continued with perfect safety, but the only objection is that it increases the sickness.—

It is very prompt in its effects, & if it do not cure the disease in 4 or 5 days, it may be laid aside. In some obstinate cases, a combination of bark & arsenic has succeeded; indeed some recommend arsenic as a preparative for the bark.

Besides intermitts, it has been used in many other diseases; in the Phlegmasia, particularly Rheumatism. I have experimented with it but am not satisfied, that it was ever productive of the least essential service. It has been supposed to be adapted to the acute & inflammatory state, but no one would trust to it here; & in chronic Rh., many other remedies are far more certain — Perhaps the only case of Rh., in which it ought to be used, is the Intermitt R. — the febrile intermittent Rheumatism and Sciatica.

In the Neuroses; Chorea, Tetanus &c. of the last, some few cases from wounds have been cured by the free use of the Min. Solut. with Laudanum. I am now trying it in a very obstinate case of Spasmodic Asthma, & it has already mitigated the disease. In Angina pectoris, arsenic is reported to have been useful, & one case has been cured by it.—

By some it has been strenuously recommended in glandular affections; if even it be serviceable which I am inclined to doubt, it must be in those cases, caused or kept up by intermitt fever—

Of its use in Cancer, I have no experience; but I presume it must have some power in healing foul & obstinate ulcers, as it constitutes the basis of most empyrical remedies for this disease, both internal & external —

Arsenic is now habitually employed in diseases of the skin, from Lepra down to the vilest herpes. I have used in some of these diseases

in combination with cicuta, & in some in-
stances with advantage —

On the whole, I have tried this remedy
with so little success, that the more I see of
it, the more my confidence in it decreases.

As a modification of the tonic power, we now proceed to speak of Astringents. Time will not allow us to investigate their modus operandi, or to enter largely into their application to diseases. We shall 1st speak of the vegetable astringents, & then of the mineral.

The bark of the different species of oak. The English oak or Quercus Robur is used in doses of ℥ss of powder q. l. h. to suspend the paroxysm of an intermitt; also in hæmorrhages, chronic diarrhœa, & advanced Dysentery. But it is more used externally; as a gargle for diseases of the fauces, a wash in leucorrhœa, hæmorrhois & prolapsus ani.

Many of our native oaks are equally efficacious; White oak; the Spanish oak has ~~not~~ acquired not a little reputation in gangrene, in intermitts &c. Some prefer the chesnut oak, but the black oak is less valuable, as it is liable to purge. I have no experience of the internal use of either of the American species, but have no doubt, that they are entitled to attention; tho' I have no confidence in the reports, which make them equal or superior to the Cinchona.

Galla or Galls. These are mere excrescences from different trees, produced by the puncture of an insect thro' the bark — they in general possess the properties of the tree, on which they grow. The most active are brought from Aleppo, but our own are not destitute of power. They are used as astringents in Chronic diarrhœa, & in that of Phthisis &c — Of the infusion ℥ss. or of the powder grs XX to xxx. — But the power is much increased by the addition of creta &c.

℞. Creta. prep.ᵃ ℥j. Infus. Gallar. ℥j. Laud. gt. x.
M. C.ᵗ ℥ss. q. t. l. — in this form it is an invaluable remedy.

Galls are used externally in hæmorrhois with great success, after inflam.ⁿ has been subdued; but the ointment should be stronger than is usually made; 3 parts of lard to 2 of powdered galls. — If the disease is situated higher up, a strong infusion of galls may be injected several times a day. The same is used as a wash in Leucorrhœa, in prolapsus or procidentia uteri. In gonorrhœa & gleet it is much used, & Sydenham speaks highly of it in these diseases.

Viscus quercinus, or Mistletoe, a parasitical plant, possesses the properties of the tree on which it grows. It is an active astringent, & was formerly used in Epilepsy, of which some cures are related. It has also been said to have done good in hæm.ⁿ Intermitt. I suspect it is adapted to nephritis — dose of bark — grs. V to I.

Kino was introduced into the Mat. Med. about half a century ago & was originally brought from Africa. Even now it is not determined, what this substance is, but it is generally supposed, that what is found in our shops, is an artificial mixture. But we sometimes meet with the pure kino, which has a very different appearance: it comes in large pieces, mixed with the bark & fibre of the plant; & has a mawkish & astringent taste — the factitious has more the appearance of a resin or extract; & is possessed of powers far inferior to the genuine. —

Mr. Davy says Kino contains more of the astrin-
gent principle than any other substance.
ʒi or ʒij or iij of it may be given in the day, either
in powder, Tincture or infusion.
Among the first who used this was Dr John
Fothergill, who found it successful in obsti-
nate intermittents and in Menorrhagia, in which
last Dr Cullen also praises it highly. In Gon-
orrhœa Mr. Bell recommends the following
℞. Kino ʒij – Alum & Mucilage off. Arab. aa ʒi.
Water ℔j. M. filter. – I never used it, but should
suppose it better adapted to Gleet, than to active
Gonorrhœa.
In Diabetes & some affections of the Stomach,
particularly pyrosis, it has been strongly
recommended by Plumberton, who gives this
formula: ℞. Kino gr x. Opii gr j. Gum Arab. q.s.
ft. pill. ij. one q. 4ta hora – I should use twice
the quantity of Kino. –
In this city Kino has been considerably
employed in intermittents. I have no idea that it is capable
of curing intermittents alone, but is often very useful
in combination, & the following ℞ is a good
one: ℞. Kino ʒij. Gentian ʒjs. Opii gr ij. M. div.
in pulv. xii. one q. s. h. during the apyrexy.
Combined with Columbo, it is an active
cathartic, & this is one of the many anomalies
from combinations of medicines.
The most common use is in Diarrhœa,
and in certain stages of dysentery. Most
phys. prefer the infusion, but I give it in
Tincture in the following ℞. Tinct. Kino
and Coct. ppt. aa ʒi Laud. gt. x. Water ʒj. M.
Catechu, or terra Japonica, is a gum resin, or
an extract from the Mimosa Catechu.

—[Catechu in Linct. is an excellent application for Psoriasis &c. — — In Ulcers succeeding bubos, in which the edges have the wormeaten appearance, & the centre is healing, so that an island of new skin is formed; the Catechu is the best application that can be made; (after the venereal virus has been subdued by a merc. course). it may be sprinkled on the ulcer from a bag or muslin, or if this do not answer, a wash as follows is very successful. ℞. Catechu ʒij — Sulph. Cup. & Sulph. Zinc. aa ʒj. Water ℔iv. m. wet the ulcer with it 8 or 4 times a day, or drop it with lint dipped in it. (This is the Ringworm ulcer.) — — — Dr Physick]
of Dr Physick.

like Kino, it is easily soluble in water or alcohol. It is a powerful astringent & is used in Europe in all the cases, in which Kino is recommended. gss & v. t. d. of powder - Kinion in proportion.

Lignum Campechense, or Hæmatoxylon Campechianum, Logwood - is conspicuously useful in Diarrhœa, chronic Dysentery, & above all, in the advanced stages of cholera - and is used in the infusion or decoction - the infus. is best for children, ℥ss. pro re natâ, & the decoct. for adults. -

Of vegetable astringents, we have already mentioned the Oak, & several others, as the uva ursi under antilithics; Bitter which I have heard of its utility in Dyspepsia & Pyrosis.

Geranium maculatum or Crowsfoot is active astringent - As a styptic, a decoction of it is prompt & complete in its action - In affections of the stomach and bowels, in diarrhœa &c - it is a popular remedy, boiled in milk. - It is said that our Indians use it in Syphilis, but I do not know in what form of the disease. It might be useful as an injection in Gon. but they drink it; & possibly in this way it may be useful, as it is diuretic & serviceable in nephritic complaints. -

Prinos verticillatus or black alder grows in marshy grounds - the bark & berries are astringent, & used in wine or spirits - also in substance; in doses equal to those of Cinchona - It is said to have cured intermittents & be useful in gangrene &c - I have only used it in cutaneous affections, & here it is the best purifier of the blood, to use a vulgar expression. That I know, & will remove all species of herpes, when used as a diet drink.

–[Unripe persimmons (fruit of Diospyros Virginiana) are a most powerful astringent, perhaps the most so of any of the class. They may be preserved in brandy, & when used diluted largely with water]
Dr P. Hybiek.

I could swell the list of our native astringents to a greater extent, but they have not been well examined, & their medical use is yet unknown. But before I leave them, I must say something of the root of the dewberry, which is the most active of all our astringents in some cases. In Diarrhœa and Chol. infantum I have scarcely ever used it without manifest advantage. ℞. ℥ss. q. t. h. of a strong decoction to a child one or two years old.

Alum or Sulphate of alumine is found in all parts of the world, including our own country, & is used as an astringent both internally and externally.

It has been used in intermitts, and not without benefit: Dr Cullen gave it with untoward but found it too irritating, while Dr Lind says, exhibited in this way, it is the most efficacious remedy we have, except bark. I have but little confidence in it in these cases, but no doubt it possesses some power. — Dr Chalmers used it with benefit in bilious fevers, & Dr Adair also with Canella alba.

In the intestinal affections it has been very useful, as in Diarrhœa, protracted Dysentery & particularly Chol. Infant. in its advanced stage, & is to be used with Lacd. Gamboge & Creta. — It is also used to check other discharges, as Leucorrhœa & Diabetes, in which last Dr Dover first used it with success, & since him, its efficacy has been fully ascertained, & some complete cures effected.

But it is still more useful in hæmorrhagy, in which its best powers are manifested. it has been said to be adapted to all cases, but this is incorrect, for, as a stimulant, it cannot be admissible in active hæmorrhagy. Its use is now restricted to Uterine hæm. in the treatment of which Dr Mantlelmont acquired some celebrity by the use of this article. But now we have some remedies decided by superior to it, & it is only in one case, that it

still maintains its reputation, viz, in Menorrhagia depending on laxity of the uterine vessels. The dose of the powder is grs v. to x & if it nauseate, add some aromatic. But a neater mode is the alum whey - ℥ij of alum boiled in ℔ij milk, or rather the boiling milk to be poured on the powdered alum.

It is used as a gargle, an injection in gleet, and as a collyrium, but in recent ophthalmia, much more relief will be obtained by the alum curd, made by rubbing alum in the white of an egg, till it coagulates; this forms a cold poultice for the eye.—

Dissolved in water with Sulph. Zinc, it forms a styptic, & when burnt, is an excellent escharotic for ulcers.—

It remains for me to treat of lead, & I shall speak only of two of its preparations; the Sacch. Sat. & Goulard's extract, the former a superacetate, & the latter a mere acetate of lead. Both are used externally, but only the former internally.—

Sacch. Saturni grs ij or iij to ℥j water forms an injection in Gonorrhœa, & diluted, a collyrium in ophthalmia; in stronger solution, a discutient for bruises &c.—

Goulard's extract is precisely similar to it in its effects, & gt. j about equals S. Sat gr. j.

The Sacch. Sat. is used internally, nor is this a new practice; it was at one period much employed, but alarmed by some deleterious effects, physicians abandoned it. Of late it has been reintroduced, & very extensively used.—

— A case of Epilepsy of 2 years standing. During which time 2 fits occurred almost every day. Dr P. gave Sac lat. ij. t. d. till he produced Col. pictorum, which cured the disease & the fits never recurred. — Case of mania cured in the same way. — Dr Physick.
In other instances the same treatment produced not the least apparent benefit. — Dr P. —

It has been tried by many in intermits, & with considerable efficacy; it is stated, that on the Cant. lines, in some refractory cases, it was found superior to bark or arsenic. I have tried it sufficiently to convince me, that it rarely does good in these cases, & is at best a very precarious remedy.

In the Neuroses. In Epilepsy, it has mitigated the paroxysms in some young patients, but I believe has never cured the disease. This affection requires the longer use of remedies than can be made of lead. — In Chorea, it has also been tried, and with the same result. In Tetanus Mr Prothuntr proposed it, & it would probably do good, with the free use of Laudanum. In several forms of mania, it is used with camphor, but the efficacy of the lead is ambiguous. In Pertussis it is represented by some writers as almost an infallible remedy; but I have used it in several cases, & without the least advantage — I have also tried it in several cases of Asthma, but it produced not the slightest impression on the disease.

It is used in some diseases of the alimentary canal, Dyspepsia, Pyrosis &c. it may be useful in them, but I doubt it extremely. Also in Cholera & Diarrhœa, but judging from what I have seen, I should say that we had so many remedies superior to it, that to trust to it would be criminally tampering with the lives of our patients.

From what I have said, you will perceive that I have no confidence in lead in the above diseases, but I am now to hold a very different

In Hemorrhages it is a most useful medicine & was used in New Engd. a century ago; but was abandoned on account of the terror inspired by the publication of Sir Geo. Baker & others.

The use of lead in these cases ought always to be preceded by copious evacuations, if any inc. action exist, particularly in hæmoptysis and flooding after abortion — Unless V.S. be premised, the lead will often be useless & even injurious, & not a single V.S. is to be prescribed, but repeated as long as any activity of pulse remains; & then the lead comes in as a most useful auxiliary.

In Uterine hæmorrhagy immediately before or after labour, lead is unavailing, & immediate delivery of child or secundines is necessary; at same time cold water is to be poured from some height on the abdomen, which I have never known fail in a single instance — But to the hæmorrhages in the unimpregnated state, lead is better adapted, & here I use it in doses of grs ij with opii grs ¼ in pill, to be repeated as often as occasion requires, & I have given in the course of a few hours ℥ss without any disagreeable consequence, except a little griping.

I think the doses generally used are too small, & that probable doses of grs x would often be much more efficacious, & might be given without any bad consequences.

A Woman took thro' mistake ℥j at once, without any bad effects; but it is to be observed, that no med. is marked by so many anomalies as this.

For herpetic ulcers in groin (venereal?) —

℞. Ung. Oxygenis. ℥j
Ung. Simp. ℥xij M
Fiat Ung.

Geoghegan

Ungnents &c.

Hazelwood's Ointment in tetter &c.
Dr Physick in tetter &c.
℞. Flor. Sulphur. ℥j
White precipit.
Nitrat. Potass.
Gr. Benzoin
Ol. Bergamot
Oxy. vitriol āā ʒj
Hog's lard. ℔ss
Ung. Lithargyrum
Ung. for tinea capitis.
Dr Chapman
℞. Sulphur
Lard āā ℥j
Sal ammoniac ʒij.
M.

Washes &c.

Wash for indt. Ulcers.
Dr Physick
℞. Sulph. zinc.
Sulph. cupr. āā ℥j
Terra japon. ℥j
aq. fontan. ℔ij.
M. ft. lotio. — wash with rag moistened in it.

Mr Pearson's Liniment to excite cutaneous irritation. Med. Chir. Tr.
℞. Ol. Olivar. ℥iss
Ol. Terebinth. ℥iss.
Sulphur. acid ℥i. M.
ft. liniment.

Mr Brodie's Lin.t for the joints, after inflam.n subdued.
℞. Ol. Olivar. ℥iss.
Acid Sulphuric ℥ss. M.
this is for Hospital pat.ts, but when cuticle is thin, it must be weaker.
Vol. 1 P. 8. Journal. Brodie on inflam.n of Synovial membrane.

Dr Reid in Erysipelas, partic.ly from the Rabies.
℞. Corros. sublim. gr. i.
Aq. Cale. ℥i. M.
(aqua phagedænica)

Tinea capitis, partic.ly the form called Ringworm of the Scalp, Porrigo Decutata.
℞ Cerus. (oxid. plumb. alb.) ℥ss
Litharg. aur. (oxid. plumb. semivit.) ℥ij
Alumin. ust. — ℥iss.
Mercur. sublim. ℥iss. ℥ss
Levi porcina ℥ij
Terebinth. Venet. ℥ss. M.
ft. ung.
Bateman

Tinea. Bateman.
℞. Subcarbon. potass — ℥ss.
aq. rosar. — ℥j
Hydrarg. Sulphurat. rubr. ʒj.
Olei essent. Bergamot. ℥ss.
Sulphur. sublimat.
adipis suillæ āā ℥ix. M.
ft. ung.
also
Equal parts Sulph. zinci,
Flor. Sulphur. & Laurel berries
made into a liniment with oil.
Bateman

Injections.

Gonorrh. with chord. & irritat. ℞
D. Chapman

℞. Opii gr ij
Camphor gr viij
Water ℥ij viij.

M.

Gonorrhœa. D. Chapman

℞. Sulph. Zinc. gr viij.
Sacch. Saturn. gr x.
Gum Arabic ℥ij.
Aqu. Pur. ℥viij.

M.

If great irrit. & chordee &c
add Laud. ℥j.
In old gleets, strengthen by
adding Corros. Sub. gr ij or iv.

Enemata

Turpentine Enema.

℞. Ol. Terebinth. ℥ss.
beat up in the white of an egg &
add half pint of milk.
(B. Physick in a chronic dysmenorrh.)

Gargles —

for ulcerated gums &c. — Dr Moore Sent.

℞. Alumin.
Borax ana ʒi.
Nitr. Purif. — ʒiss.
Infus. Ros. ℥v. M.
ft. Gargarism.

Gargle for Venereal Sore throat also for ulcers not venereal, provided not inflamed. — Geographan. Sulphur plumbo

℞ Corrosiv. Sub. grij.
Liq. pur. ℥viij
Mel. Ros. ʒi. M.
ft. Gargar.
To be drawn up once, repeated by the mouth.

Diaphoretic Mixtures –

℞. Sulph. Sodæ ℥j.
Antim. tartrat. gr. j.
Suc. Limon. ℥j.
Aq. pur ℥iv.
M. – ℥ss. q. s. h.

Diaph. draught. Chm.

℞. Laudan. gt. XX
(or Elix. paregor. ℥j)
Vin. Antimon. gt. XL.
Spt. Nitr. dulc. ℥j
Aq. fontan. ℥j. M.

This to be taken every 3 hours

(Stimulating) –

Decoct. Lusitan.
℞. Sarsaparilla
Sassafras
Rad. Sandeys
Guaiac ãã ℥iij –
Mezereon. – ℥j.
Sem. Coriand ℥vj –
M. Boil in ℔xx. water
till reduced to ℔ij. Strain
& give ℔ss. t. d. –

Guaiac Mist.

℞. G. Guaiac. ℥ij & ℥iss
G. Arabic – ℥ij
Sacch. Alb. ℥ii
Aq. pur. ℥viij. –
M. – ℥ij to ℥iv per diem.

Ottawson in the jail fever –

℞ Carb. Ammon. ℥j
Camphor – ℥j
Gold. sulph. Antimonial
Opii – gr. ij. M
Div. in pulv. IV – gm. j.
ter quotidie.

(Tonics)

In Amenorrhea. Dr Chapman.
℞. Cinchon. ʒiij
Pulv. Zingiber ʒij
Rubig. ferri ʒj.
Syrup q.s. -
M. ft. Electuarium

Chalybeate Wine.
℞. Rubig. ferri ℥ss.
Gentian
Orange peel aa ℥ss
Port wine ℔ij. -
Ingredients to be bruised & put into ℔ wine. Expose to gentle heat 2 days. decant. & ⅔ wineglass. —
Dr Physick prefers sound Cider as menstruum.

In Epilepsy, Chorea &c, after purging Chapman
℞ Sulph. Zinci gr ij
Valerian gr x.
Cinchon. ʒj.
M. ft. p.d. — mona
Sulph. Zinci gradually to gr vj. p.d. —

(used in Mrs F's case. Walnut St.)
℞. Myrrh
Rhei aa gr. V.
Sulph. ferri gr ij. M.
p.d.

In intermitts. Dr Chapman
℞. Cinchon. — ʒss
Pulv. Serpentar. ʒj
Carbon Sodæ. ʒss.
M. divid. in pulv. 4. —
1. quat in die. —

In intermitts. Chap. —
℞. Kino — ʒij
Gentian ʒss.
Opii gr ij. M. divid in pulv. XII. 1 q.s.h. in apyrexy.

Dr Adair's ℞. in obst. Intermitts —
℞. Sulph. Cupri gr IV.
Extr. Cinchon gr XXXij.
Syrup — q.s. M.
ft. pill. XVI. — S. 1. quatur in die for 3 or 4 weeks —

Tonic powder.
℞. Rubig. ferri — ʒij
Pulv. Colomb. ʒi
Pulv. Zingib ʒj. M —
divid. in pulv. XII. —

Chalybeate pills.
℞. Carbon. ferri
G. Guaiac
Sap. venet. aa —
Pill 2. o.m. & o.n. —

Anti-Emetics.

Dr Physick -

℞. Sal. tart. ʒi
Gazal. — ʒi
Sand. — gt. x.
Ol. Mentt. gt. vj.
Aq. font. ℥iv.

M. to a child ℥ss with lemonade every half hour. —

Thomas' proact.

℞. Carb. potass ʒij.
Aq. pur. ℥iv.
Solve.

℞. Suc. limon. ℥ij
Sacch. alb. ℥ss.
Aq. font. ℥i.
M.

Of each take ℥i, first of the Sol. of potass & then the lemon juice after each vomiting.

Emetics.

Dr Pertapis Thomas' P. in children

℞. Emet. tart. grs iij
Aq. pur. ℥vi.
Syr. simp. ℥ii.
M. fiat Solut. cujus Cap. Coch. parv. 2. statim, & Coch. 1. quoque quarta parte hord donec operavit. —

Antacids.

(Thomas' P)

℞. Calcined magnes. ʒi.
Pulv. Rhei grs x
Aq. mentt. ℥i.
M. —

In gripings of children with 3 or 4 months old.

Dr Chapman

℞. Calc. magnes. grs xx
Rhei grs. vi.
Ol. Anisi gt. iv.
Laudanum gt. iv.
Sugar — ʒi.
Water — ℥i.
M.

Iceland Moss Jelly — Dr Saml Jackson —

Boil ℥iv. of picked Iceland moss in three pints of water to a pint & half; strain the liquid through gauze & add sugar & lime-juice according to taste. Then evaporate to one half, pour it into an earthen vessel & set it to cool. The same may be repeated with the moss that remains — Previous to making the jelly, the moss should be scalded with boiling water & washed untill the water comes off colourless. ——

Volatile & Stimulating Juleps &c.

Vol. Julep of Horf.

℞. Carbon. Ammon. ʒi.
Gum arabic — ʒiij.
Sacch alb. ʒij.
Aq. pur. — ℥viij.
M. ℥ss. q. s. h. —

Camphorated mixture.

℞. Camphor. ʒi.
g. Myrrh. ℥ss.
Sacch alb. ʒij. —
Aq. pur. ℥vj. M.
C. ℥ss. q. s. h. —

Ether mixture.

℞. Spt. Ether. ʒi
Laudan. gtt LX.
g. Arab. — ʒij
Sacch. alb. ʒij
Aqua. — ℥vi. M.
℥ss. —

Gum pill for old people. Dr Chapman

℞ Ara fœtid
Galbanum
Myrrh — aa ʒi.
Ol. Succin. — ʒi.
Syrup. q. s. M.
4th pill. — (2. prore nata)

℞. Aq. ammon. ʒiij.
Ol. Oliv. ʒij.
M.

Dr Chapm's bet.
In cardialgia of pregnant women.

℞. Aq. Ammon. —
Calcin. Magnes. aa ʒi
Aq. Cinnamon. ℥ij
Aq. fontan — ℥vj.
M. ℥ss. after meals or when the uneasiness is felt.

Fœtid mixture —

℞. Asafœt. ʒi
Sacch alb. ʒij
Aq. Font. ℥viij
M — ℥ss —

Fœt. julep used by Dr Parrish in Manico pots.

℞ Asafœt. ʒvj. Rub down in Aq. Mentt ℥ij. & add Laud. ʒij. M.
℥ss. q. s. h. —

Cretaceous & Astringent Mixt.

Cretac. mixt. of Hosp.

℞. Carbon. calcis ℥ss.
Gum Arab. — ℥ij
Sacch. alb. — ℥ij
Laudanum — ʒi —
Aq. purg. ℥viij. M.

℥ss. q. s. h. —

Dr Chapm —

℞. Cret. ppt. ʒi
Pulv. gallar. ʒi.
Laudanum gtt X. M.
℥ss. q. t. h.

Dr Otto.

℞. Pulv. gallar. ʒi.
Aq. — ℔j. M.
Boil down to ℔ ¾.
& add a gill of brandy.
C. winegl. ℥ss. q. t. h.
In diarrhœa produced by intemperance.

Dr Phynick. Wash for the worm eaten ulcers succeeding buboes. —

℞. Catechu ʒij —
Sulph. Cupri
Sulph. Zinci ãã ʒj.
Water ℥iv. — M.
Drop with lint wet in this wash, 8 or X times a day.

Cretac. mixt. Dr Wirta —

Cret. prep. ʒj. —
Laudanum gtt. V.
Tinct. Cinnam. ℥ij.
Mucil. g. Arab. ℥ss. —
Ad. ℥ss. q. s. h. —

Dr Chapman

Tinct. Kino
Cret. ppt. ãã ʒi.
Laudan — gtt. X
Water — ℥ʒi.
M — ℥ss. Quere nate.

Dr Hewson in Diarrhœa —

℞. Kino grs XV.
Cretæ gr V.
Opii gr i.
Ol. Mentk. gtt. i. — Mag. with Molasses. & take it occasionally.

Dr Chapman's Cretac. Julep —

℞. Cret. ppt. ℥ij
Laudan. gtt. XL v. L.
Cinnamon. ℥ij — M.
℥ss. q. h. vel q. bined. h. —
If diarrhœa urgent, add
Tinct. Kino ʒi vel ʒij.

Cretaceous & astringent

In Diarrhoea of infants
(Thomas' Pract.)

℞. Cret. ppt. ℥ss.
Sacch. alb. ℥ij
Tinct. Lavend. Comp. ℥iss.
M. ℥i. t. d. —

Dr Physick's Syrup of galls
(from Mr. S. Cox)

℞. Pulv. gallar. ℥ii
Cloves & nutmeg ℥i.
Aq. vitæ ℥vi. m.

Put the ingredients into a coffee cup, upon the top of which two forks are crossed to support a lump of loaf sugar. The brandy is then to be set on fire & the forks to be supplied with sugar as long as the brandy continues to burn — Of the clear part of this, a teaspoonfull is to be taken every one, 2 or 3 hours pro nate

Oily mixtures.

Mist. Oleag. of Hospital.

℞. Ol. Ricini. ℥ij.
Gum Arab. ℥ss.
Laudanum ℥j.
Sacch alb. ℥ij.
Aq. Comm. ℥vj.
M. Ds. ℥ss. t. d. —

Oleag. mixt. of Ch. Lect.

℞. Ol. Ricini — ℥j
G. Arab. — ℥ij
Sacch alb. — ℥i.
Laudanum — gtt. IX.
Mint water ℥ij. M.
℥ss. q. h. vel q. s. h. —

Dr Barton's. Diarrhoea

℞. Ol. Ricini — ℥j.
G. Arab. ℥ij —
Sac. alb. ℥ij —
Aq — ℥viij —
Laudanum — ℥j. — M.
℥ss. q. t. h. —

(Chap.)

℞. Ol. Ricin. ℥j.
Decoct. Ceratea ℥iij. M. —

(Cath.c & Layat. Comb.t)

Spiced Rhubarb. Ruspman.

Spirituous

℞. Rad. Rhei ʒi

Nutmeg ʒi

Cloves ℥ss.

White sugar ℥vi

Spt. Cinnamon. ℔ij.

M. - place in dist & burn it

Spirit. - ʒi. for adult. ʒi. for child

Aqueous. Chapman

℞. Rad. Rhei

Cinnamon

Mace aa ʒij.

Cut up, & infuse Water ℔ij.

Simmer down ℥ij. add sugar.

(& spirit enough to prevent fermentation) -

Chap.

℞. Fol. Senna

Sulphat. potass. aa ℥ss.

Aq. - ℥viij. M -

Simmer till reduced ℥ij. -

& add sugar q.s.

Pectoral Mixtures. & Expectorants

℞. Gum Arabic. ℥i
Laudanum ℥i.
Vin. Antimon. ℥ss.
Sol. Glycirrhiz ℥viij.
M. Ct. ℥ss. q. s. h.

(Hospital Rx.)

℞ - Ext. Glycirrh. ℥ij
Vin. Antimon. ℥i.
Elix. paregor. ℥ij.
Aq. fontan - ℥iij.
M. ℥ss. q. s. h. —

D. Chapman's Lect.

℞. D. Chapman's Lect.
Oxymel. Scill. ℥i
Elix. paregor. - ℥ss
Spt. nit. dulc. - ℥ss.
Vin Antimon. ℥ij
Aq. fontan - ℥viij -
M. ℥ss q. s. h. —

Dr Physick, cgh. in Hydrotherapy, while using Digitalis.

℞. Rad. polyg. Senek. ℥ss.
Rad. Glycirrh. ℥i.
Hay seed. tablespfll
Sugar candy ℥ij -
Water - ℔j. - M -
Boil for an hour. ℥ss. q. s. h. -

Dr Chapman's Lect. —
In Asthma & coughs with little excitement.

℞. Rubdown ℥ij of Gum Ammoniac, in ℥viij of water, & add Oxymel Scill. ℥i.
Laudanum ℥i. M -
Ct. ℥ss. q. s. h.

Dr Chapman's, lect.
In tightness and difficult expect. in last stages of Phthysis. —

℞. Nitric acid ℥ij
Aq. fontan ℥viij. M -
Pour this on Gum Ammoniac ℥ij. & triturate gradually till dissolved. then add Laud. q. s. +
℥ss. q. s. h. —

Dr. Hewson

℞ Gammoniac ℥i
Nitric acid ℥ss.
G. arab - ℥ij
Aq. pur. ℥iv. M..
℥ss pro re nata

Dr Hewson Lyon, Senilis.

℞. Syr. Scill. ℥ss.
Balsm. Copaiv. ℥i
Laudan. gt. xl.
Muc. G. arab. ℥iiss. M
ft. ℥ss. q. s. h.

℞ G. Ammoniac ℥i.
Syr. Scill. ℥ss —
Tinct. opii. gt. xl
Aq. menth. ℥iv
M

Expect

Dr W S love recom. very highly it fol? in obst. Coughs, Asthma &c he had it from Tucker of Burlingt

℞. Pulv. Scill. arid
Gum Ammoniac ā ℥ij
Flor Benzoin gr v.
Oxymel Scill. q.s. ℞
f. Mass. in pil xvi divid.

Asthma

℞ Asafet.
Galban.
Myrrh ā ℥i
Succin ℥i.
Syrup q. s. m.
f. pil. q.m. s. ut prescribatur